

Stanford



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CONTACT INFORMATION

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ACADEMIC APPOINTMENTS

- Professor, Electrical Engineering
- Professor, Computer Science
- Member, Bio-X
- Member, Wu Tsai Human Performance Alliance
- Member, Wu Tsai Neurosciences Institute

PROGRAM AFFILIATIONS

- Stanford SystemX Alliance

Publications

PUBLICATIONS

- **Rethinking Error Injection for Effective Resilience**
Mirkhani, S., Cho, H., Mitra, S., Abraham, J.
2014
- **Sensor-to-Digital Interface Built Entirely with Carbon Nanotube FETs** *IEEE Journal on Solid-State Circuits, Special Issue on IEEE Intl. Solid-State Circuits Conf.*
Shulaker, M., Van Rethy, J., Hills, G., Wei, H., Chen, H., Gielen, G., Mitra, S.
2014
- **QED Post-Silicon Validation and Debug: Frequently Asked Questions**
Lin, D., Mitra, S.
2014
- **System-Level Benchmarking with Yield-Enhanced Standard Cell Library for Carbon Nanotube VLSI Circuits** *ACM Journal on Emerging Technologies in Computing Systems*
Bobba, S., Zhang, J., Gaillardon, P., E., Wong, H., S.P., Mitra, S., De Micheli, G.
2014

- **Combinational Logic Design Using Six-Terminal NEM Relays** *IEEE TRANSACTIONS ON COMPUTER-AIDED DESIGN OF INTEGRATED CIRCUITS AND SYSTEMS*
Lee, D., Lee, W. S., Chen, C., Fallah, F., Provine, J., Chong, S., Watkins, J., Howe, R. T., Wong, H. P., Mitra, S.
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- **Monolithic Three-Dimensional Integration of Carbon Nanotube FET Complementary Logic Circuits**
Wei, H., Shulaker, M., Wong, H., S.P., Mitra, S.
2013
- **Carbon Nanotube Computer** *Nature (Cover Feature)*
Shulaker, M., Hills, G., Patil, N., Wei, H., Chen, H., Gielen, G., Mitra, S.
2013; 501 (7468)
- **Rapid Exploration of Processing and Design Guidelines to Overcome Carbon Nanotube Variations**
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- **Self-Repair of Uncore Components in Robust System-on-Chips: An OpenSPARC T2 Case Study**
Li, Y., Cheng, E., Makar, S., Mitra, S.
2013
- **Detection of Early-Life Failures in High-K Metal-Gate Transistors and Ultra Low-K Inter-Metal Dielectrics**
Kim, Y., M., Seomun, J., Kim, H., O., Do, K., T., Choi, J., Y., Kim, K., S., Mitra, S.
2013
- **Sascha: The Stanford Carbon Nanotube Controlled Handshaking Robot**
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2013
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Sauer, M., Kim, Y., M., Seomun, J., Kim, H., O., Do, K., T., Choi, J., Y., Mitra, S.
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2013
- **Reliability of Graphene Interconnects and N-type Doping of Carbon Nanotube Transistors**
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2013
- **Underdesigned and Opportunistic Computing** *Keynote paper, IEEE Trans. CAD*
Gupta, P., Srivastava, M., Agarwal, Y., Swanson, S., Sylvester, D., Kumar, R., Mitra, S.
2013
- **Effective Post-Silicon Validation**
Mitra, S.
2013
- **Quantitative Evaluation of Soft Error Injection Techniques for Robust System Design**
Cho, H., Mirkhani, S., Cher, C., Y., Abraham, J., A., Mitra, S.
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- **Experimental Demonstration of a Fully Digital Capacitive Sensor Interface Built Entirely using Carbon Nanotube FETs**
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- **Expression of epidermal growth factor variant III (EGFRvIII) in pediatric diffuse intrinsic pontine gliomas** *JOURNAL OF NEURO-ONCOLOGY*
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Chen, C., Lee, W., S., Parsa, R., Chong, S., Provine, J., Watt, J., Mitra, S.
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 - **Contact Hole Patterning for Random Logic Circuits using Block Copolymer Directed Self-Assembly** *Conference on Alternative Lithographic Technologies IV*
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 - **Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data** *PHYSICAL REVIEW LETTERS*
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 - **Planck early results. XXII. The submillimetre properties of a sample of Galactic cold clumps** *ASTRONOMY & ASTROPHYSICS*
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 - **Planck early results. X. Statistical analysis of Sunyaev-Zeldovich scaling relations for X-ray galaxy clusters** *ASTRONOMY & ASTROPHYSICS*
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- **Planck early results. XII. Cluster Sunyaev-Zeldovich optical scaling relations** *ASTRONOMY & ASTROPHYSICS*
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- **Planck early results. XV. Spectral energy distributions and radio continuum spectra of northern extragalactic radio sources** *ASTRONOMY & ASTROPHYSICS*
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