

**Sami Saleh Alghamdi***Assistant Professor, Department of Electrical and Computer Engineering, King Abdulaziz University***Education**

<i>Degree</i>	<i>Field of Study</i>	<i>Institution</i>	<i>Year</i>
Ph.D.	Micro/nanoelectronics	Purdue University-West Lafayette	2019
MS	Micro/nanoelectronics	Purdue University-West Lafayette	2014
BS	Electrical Engineering	King Abdulaziz University	2009

**Academic Experience**

<i>From To</i>	<i>Institution</i>	<i>Title</i>	<i>Full or Part Time</i>
2019 present	King Abdulaziz University	Assistant Professor	Full Time
2009 2019	King Abdulaziz University	Teaching Associate	Full Time
2016 2019	Purdue University	Teaching Assistant	Part Time
2009 2010	Umm Alqura University	Consultant	Part Time

**Non-Academic Experience (Including Consultations)**

2009 2010	Umm Alqura University	Consultant	Part Time
2013-2018	President of Arabian Gulf Boilermakers student Organization, Purdue University		
2014-2014	ECE Graduate Students Mentor, Electrical and Computer Engineering, Purdue University		

**Certifications and Professional Registrations**

2010	NCESS/Saudi Council of Engineers	FE Certified
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**Current Membership in Professional Societies and Organizations**

	<i>Society/Organization</i>	<i>Rank</i>	<i>Since</i>
i.	IEEE	Member	2019
ii.	IEEE	Students Member	2008
iii.	Saudi Council of Engineers, Saudi Arabia	Associate Electrical Engineer	2010

**Honors and Awards**

Outstanding Students Award by Saudi Cultural Mission, Washington, DC	May 2014
KAUST Excellence Award for Outstanding Saudi Students in US	May 2014
Fellowship Award proceeded by a Scholarship Award from KAUST, Thuwal, Saudi Arabia	2008-2009

**Institutional and Professional Services**

IEEE Western Saudi Arabia Section Industrial Relations Coordinator	2019 present
IEEE Western Saudi Arabia Section Student Activities Chair	2019 present
2020 present Member of the Graduate program Development Committee in ECE, KAU	2020 present
Team Supervisor Instructor, ROBOCON 2010 (International robot contest), Cairo, Egypt	Sep. 2010

**Principal Publications/Presentations from the Past Five Years**

- S. Alghamdi**, M. Si, H. Bae, H. Zhou, and P. D. Ye. “Single Pulse Charge Pumping Measurements on GaN MOS-HEMT: Fast and Reliable Extraction of Interface Traps Density,” in *IEEE TED*, vol. 67, no. 2, pp. 444-448, **2019**
- H. Bae, J. Noh, **S. Alghamdi**, and P. D. Ye, “Ultraviolet Light-Based Current-Voltage Method for Simultaneous Extraction of Donor- and Acceptor-Like Interface Traps in  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> FETs,” in *IEEE EDL*, vol. 39, no. 11, pp. 1708-1711, **2018**.
- H. Zhou, M. Si, **S. Alghamdi**, G. Qiu, L. Yang and P. D. Ye. “High Performance Depletion/Enhancement-Mode  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> on Insulator (GOOI) Field-effect Transistors with Record Drain Currents of 600/450 mA/mm,” in *IEEE EDL*, vol. 38, no.1, pp. 103-106, **2017**.
- X. Lou, H. Zhou, S. B. Kim, **S. Alghamdi**, X. Gong, J. Feng, P. D. Ye, R. G. Gordon, “Epitaxial Growth of MgCaO on GaN by Atomic Layer Deposition,” in *Nano Letters*, 16, 7650-7654. **2017**.
- H. Zhou, **S. Alghamdi**, Gang Qiu, M. Si and P. D. Ye, “Al<sub>2</sub>O<sub>3</sub>/ $\beta$ -Ga<sub>2</sub>O<sub>3</sub> (-201) Interface Improvement Through Piranha Pretreatment and Post Deposition Annealing,” in *IEEE EDL*, vol. 37, no. 11, 1411-1414. **2016**.
- H. Zhou, X. Lou, N. J. Conrad, M. Si, H. Wu, **S. Alghamdi**, S. Guo, R. G. Gordon, and P. D. Ye, “High Performance InAlN/GaN MOSHEMTs Enabled by Atomic Layer Epitaxy MgCaO as Gate Dielectric,” in *IEEE EDL*, vol. 37, no. 5, 556-559, **2016**.
- S. Alghamdi**, M. Si, H. Bae, H. Zhou, and P. D. Ye, “Measurements of Interface Trap Density on GaN MOS-HEMTs with Epitaxial MgCaO and Amorphous Al<sub>2</sub>O<sub>3</sub> Gate Stacks by Single Pulse Charge Pumping,” in *50th IEEE SISC*, 2019
- S. Alghamdi**, W. Chung, M. Si, and P. D. Ye, “Time Response of Polarization Switching in Ge Hafnium Zirconium Oxide Nanowire Ferroelectric Field-effect Transistors,” *76th IEEE DRC*, Santa Barbra, CA, 1-2, 2018.
- S. Alghamdi**, M. Si, L. Yang and P. D. Ye, “Low Frequency Noise in MoS<sub>2</sub> Negative Capacitance Field-effect Transistor,” *2018 IEEE IRPS*, San Francisco, CA, pp. P.TX.1-1-P.TX.1-5, 2018.

### **Recent Professional Development Activities** (*Workshops, Trainings etc.*)

Workshop: “The 7 Types of Waste in Higher Education” King Abdulaziz University

Sep. 2019