

Dr. Shima Sadaf

Assistant Professor



Personal Data:

Nationality | INDIAN
Date of Hire | 24th Nov. 2022
Date Rank Obtained | 24th Nov. 2022
Department | Electrical Engineering
Email | ssadaf@kfu.edu.sa
Office No | 3113 (Building 59)
Office Phone No | 013 589 7743

Education:

Academic Degree	Major	specialty	Place of Issue	Address	Date
Doctorate (PhD)	Electrical Engineering	Power Electronics, renewable energy sources and Microgrid/Nanogrid applications	Qatar University	Qatar University, P.O. Box: 2713 – Doha, Qatar	03 rd Feb. 2022
Masters (M.Sc.)	Electrical Engineering	Power System & Drives	Aligarh Muslim University	Aligarh, Uttar Pradesh INDIA - 202002	12 th Jun. 2007
Bachelor (B.Sc.)	Electrical Engineering	Electrical Engineering	Aligarh Muslim University	Aligarh, Uttar Pradesh INDIA - 202002	24 th May 2004

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions):

PhD	Modeling, Design, and Implementation of High Gain Power Electronic DC-DC Converters for Nanogrid Applications (With Distinction & Gold Medal)
Master	Voltage Stability Analysis of Electrical Power Systems Incorporating Different Compensation Schemes (With Honors)

Experiences:

Title of Job	Address of Work	Country	Date	
Assistant Professor	Department of Electrical Engineering, College of Engineering, King Faisal University, Eastern Province - Al Ahsa, PO Box 400 - Post Code 31982	Kingdom of Saudi Arabia	From	24 th Nov. 2022
			To	Till Date
Graduate Teaching Research Assistant	Qatar University, P.O. Box: 2713 – Doha, Qatar	Qatar	From	3 rd Oct. 2018
			To	31st Dec. 2021

Electrical Design Engineer	Hyundai Engineering & Construction Co. Ltd., National Museum of Qatar Project	Qatar	From	1st Jan. 2012
			To	31st Aug. 2018
Electrical Design Engineer	ETA M & E Division, ETA Engineering and Contracting W.L.L., P. O. Box:23773, Doha, Qatar	Qatar	From	1st Apr. 2010
			To	31st Dec. 2011
Lecturer	Integral University, Dasauli, Bas-ha Kursi Road, Lucknow 226026, India	India	From	15 th Jul. 2007
			To	31st Oct. 2008

Research Interests:

1. Power Electronics Converters
2. Electrical Power and Renewable Energy Sources
3. Microgrid/Nanogrid applications
4. High Gain DC-DC Converter Topologies
5. Power Converter for Electric Vehicle Applications
6. Wireless Power Transfer

Publications:

#	Name of author(s)	Title of Publication	Publisher and Date of Publication	Link of Publication
1.	S. P. Gautam, M. Jalhotra, A. Iqbal, L. K. Sahu, M. R. Kumar, M. Malik, and S. Sadaf	Techniques to Reduce Capacitor Voltage Ripples in Multilevel Inverters	IEEE Access, 08 September 2023	10.1109/ACCESS.2023.3312188
2.	S. Islam, M. D. Siddique, M. Khursheed, A. Iqbal, R. Hussan, and S. Sadaf	Active-Neutral-Point-Clamped (ANPC) based 7-level switched-capacitor multilevel inverter (SC-MLI) with reduced magnitude of spikes in source current	PATENT APPLICATION PUBLICATION, INDIA, 202311018534 A, 12 May 2023	-
3.	S. Sadaf , A. Iqbal, M. Meraj, P. K. Maroti, M. Samiullah and I. Khan	A New Type of Boost Converter with Dual Duty and High Gain for DC Microgrid Applications	IEEE, 2022 Second International Conference on Power, Control and Computing Technologies (ICPC2T), 26 May 2022	10.1109/ICPC2T53885.2022.9776823

4.	A. Iqbal, S. Sadaf , N. Al-Emadi, M. S. Bhaskar and M. Meraj	DC TO DC SWITCHED INDUCTOR BOOST CONVERTER	US Patent, US 11,316,430 B2, 26 April 2022	-
5.	S. Sadaf , N. Al-Emadi, A. Iqbal, and M. S. Bhaskar	Double stage converter with low current stress for low to high voltage conversion in nanogrid	Energy Reports (Elsevier), November 2021	10.1016/j.egy.2021.08.199
6.	S. Sadaf , N. Al-Emadi, A. Iqbal, M. S. Bhaskar, and M. Meraj	Modelling, analysis, and implementation of a switched-inductor based DC/DC converter with reduced switch current stress	Wiley, IET Power Electronics, 04 May 2021	10.1049/pel2.12127
7.	S. Sadaf , N. Al-Emadi, P. K. Maroti and A. Iqbal	A New High Gain Active Switched Network-Based Boost Converter for DC Microgrid Application	IEEE Access, 03 May 2021	10.1109/ACCESS.2021.3077055
8.	S. Sadaf , N. Al-Emadi, M. S. Bhaskar, and A. Iqbal	Triple-switch DC-to-DC converter for high-voltage boost application—Revista	Lecture Notes in Electrical Engineering, Singapore: Springer Singapore, 21 April 2021	10.1007/978-981-33-4080-0_19
9.	S. Khan, A. Mahmood, M. Zaid, M. Tariq and S. Sadaf	A Single Inductor, Single Switch High Gain DC-DC Boost Converter	IEEE, 2020 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), 12 April 2021	10.1109/WIECON-ECE52138.2020.9398038
10.	S. Sadaf , M. S. Bhaskar, M. Meraj, A. Iqbal and N. Al-Emadi	Transformer-Less Boost Converter With Reduced Voltage Stress for High Voltage Step-Up Applications	IEEE Transactions on Industrial Electronics, 02 February 2021	10.1109/TIE.2021.3055166
11.	Sadaf S. , AlEmadi N., Iqbal A., Meraj M., Bhaskar M.S.	A Novel Modified Switched Inductor Boost Converter with Reduced Switch Voltage Stress	Qatar University Annual Research Forum and Exhibition (QUARFE 2020), Doha, Qatar. 28 October 2020	10.29117/quarfe.2020.0090

12.	S. Sadaf , M. S. Bhaskar, M. Meraj, A. Iqbal and N. Al-Emadi	A Novel Modified Switched Inductor Boost Converter With Reduced Switch Voltage Stress	IEEE Transactions on Industrial Electronics, 05 February 2020	10.1109/TIE.2020.2970648
13.	S. Sadaf , N. A. Al-Emadi, A. Iqbal, M. S. Bhaskar and M. Meraj	New High Gain 2LC-Y Multilevel-Boost-Converter (2LC-Y MBC) Topologies for Renewable Energy Conversion: Members of X-Y Converter Family	IEEE, 2019 IEEE 28th International Symposium on Industrial Electronics (ISIE), 01 August 2019	10.1109/ISIE.2019.8781355

Language Proficiency:

1. English
2. Hindi
3. Urdu