

# Publications

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## *Published in peer reviewed journals*

1. **Phukan, A.,** & Bhattacharyya, N. S. Frequency self-compensating technique for mitigating detuning effects due to bending for wearable patch antennas. *Engineering Research Express*, 5(4):045059, 2023.
2. **Phukan, A.** and Bhattacharyya, N.S. Low-density foam as an adhesion facilitator between silicone rubber and copper sheet for use in flexible microwave antennas. *Materials Research Express*, 6(12):126331, 2020.
3. **Phukan, A.,** Borah, K. and Bhattacharyya, N.S. Compact patch antenna on structurally modified magnetodielectric substrate. *Progress In Electromagnetics Research C*, 64:11-20, 2016.

## *Paper presented in international conference*

1. **Phukan, A.** and Bhattacharyya, N.S. Nano-Magnetodielectric Composite Based Substrate for use in Microwave Planar Devices in X-band. *International Journal of Research in Engineering and Technology*, 06(13):42-46. doi:<https://doi.org/10.15623/ijret.2017.0613009>, International Conference on Emerging Trends in Nanomaterials Science and Technology (ICETNMST-2017, January-4-6, 2017), organized by Department of Science and Humanities, National Institute of Technology (NIT), Nagaland at NIT, Nagaland.
2. **Phukan, A.** and Bhattacharyya, N.S. Single T-slotted patch antenna performance on structurally modified dielectric and nano ferrite based magnetodielectric substrate. International Conference Technova-2016 (22-23 December, 2016) organized by Department of Electronics & Communication Technology, Computer Science, IT, and Instrumentation, USIC Gauhati University, Guwahati, Assam, India and Krishi Sanskriti, New Delhi, India held at Gauhati University.

# Publications

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## *Paper presented in national conference*

1. **Phukan, A.** and Bhattacharyya, N.S. Dual T-slotted patch antenna performance on structurally modified dielectric and nano ferrite based magnetodielectric substrate" at the UGC-SAP (DRS-II) sponsored National Conference on Hard and Soft Condensed Matter Physics (NCHSCMP-2017, 2-4 March, 2017) organized by Department of Physics, Tezpur University at Tezpur University.
2. **Phukan, A.** and Bhattacharyya, N.S. An analysis of a slotted patch antenna performance on structurally modified dielectric and nano ferrite based magnetodielectric substrate. National Thematic Workshop on Advances in Nanostructured Materials: Application and Perspectives (ANMAP-2016, June 1-2, 2016), organized by Assam Kaziranga University, Jorhat, Assam & UGC-DAE Consortium for Scientific Research, Kolkata Centre at Assam Kaziranga University, Jorhat, Assam.

## *Communicated to referred journals*

1. **Phukan, A.** and Bhattacharyya, N.S. Interaction of Wireless Body Area Network Antenna with Human Wrist Phantom. *International Journal of Communication Systems, John Wiley & Sons.*
2. **Phukan, A.** and Bhattacharyya, N.S. Flexible Low-Profile Shield for Reducing Back Radiation of Wrist-Worn Antenna *IEEE Transactions on Antennas and Propagation.*