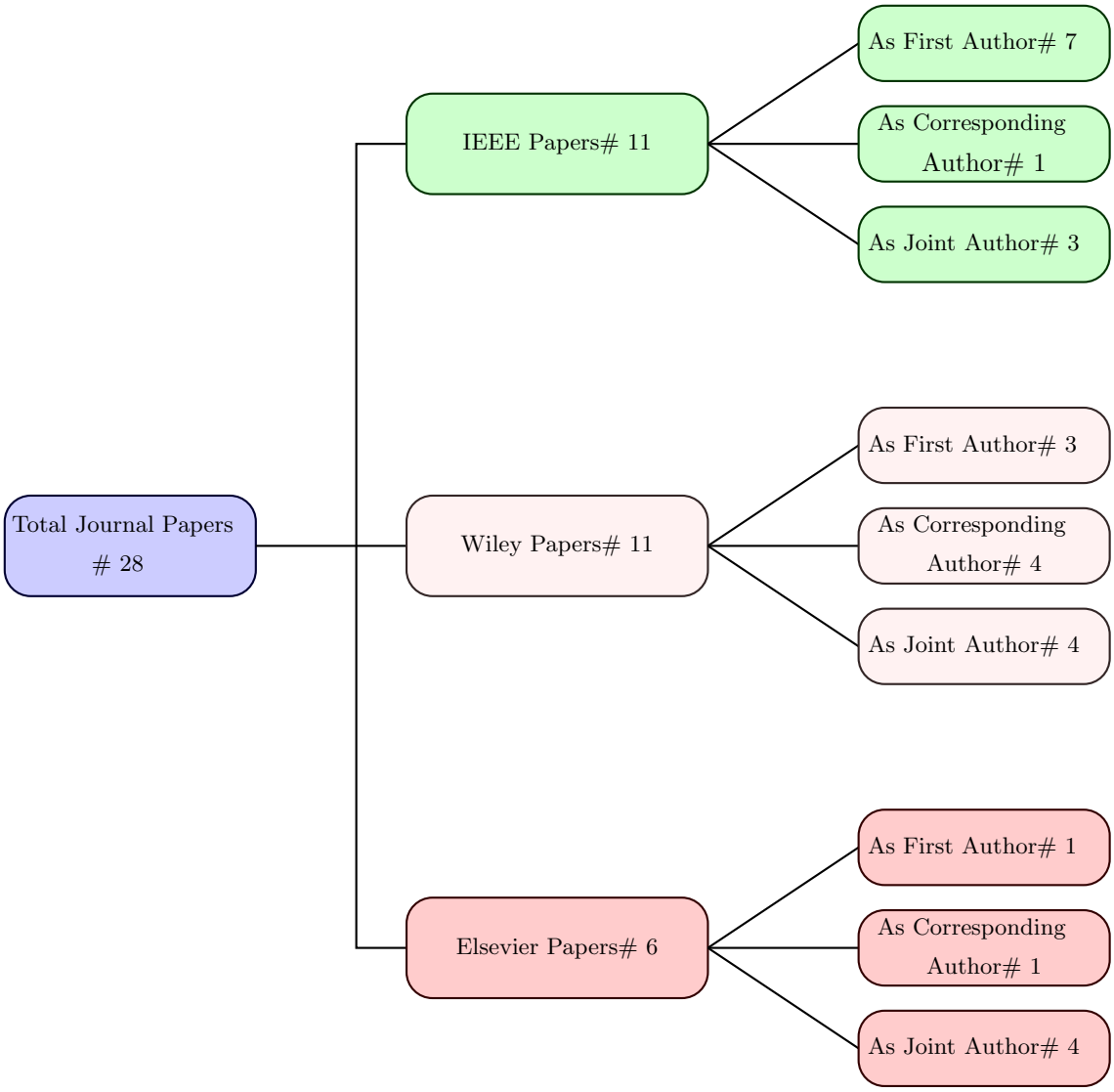
Research Publications

Dr. Dharmendra Dixit (dharmendradixit@mnnit.ac.in, d.dixit2007@gmail.com)



Refereed Journal Papers: (#28)

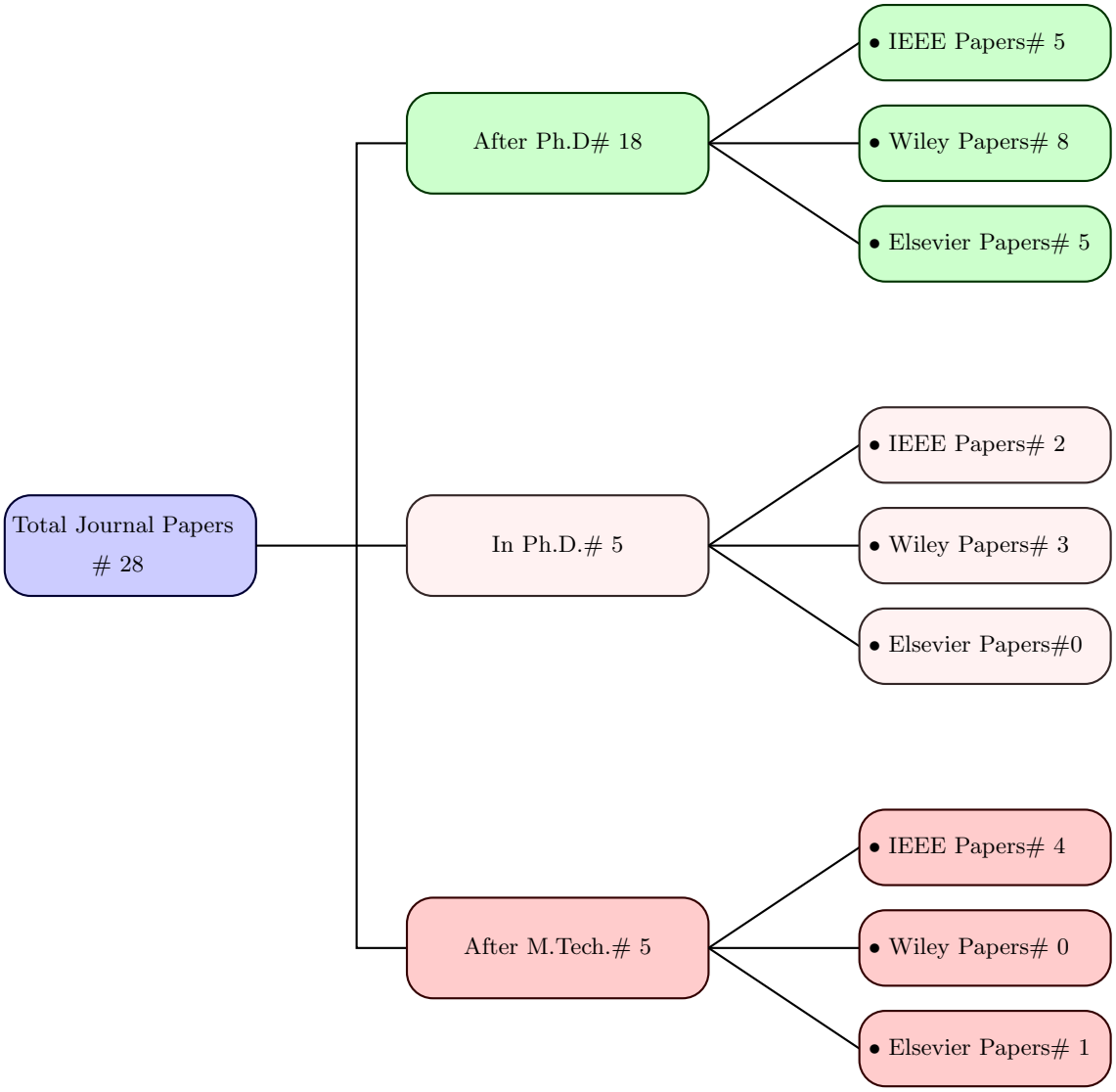
- **Papers Published in the IEEE Journals: (#11)**

1. P. Maurya, **D. Dixit**, A. K. Mishra, V. Bhatia, and O. Krejcar, "Performance Analysis of RIS-Assisted Fluid Antenna Systems over Rician Fading," *IEEE Wireless Communications Letters,* vol. 15, no. 1, pp. 910 - 914, 2026. Impact Factor=5.5, ISSN: 2162-2337
2. S. Das, **D. Dixit**, and N. Kumar, "Enhanced Performance in Mixed THz and Multi-antenna RF Systems with MRC Diversity," *IEEE Wireless Communications Letters,* vol. 14, no. 1, pp. 68-72, Jan. 2025. Impact Factor=5.5, ISSN: 2162-2337
3. R. Makkar, **D. Dixit**, D. Rawal, N. Sharma, and S. Sharma, "On the exact closed-form ABEP analysis of downlink NOMA over mmWave TWDP fading," *IEEE Communications Letters*, vol. 27, no. 4, pp. 1115 - 1119, Apr. 2023. Impact Factor=4.4, ISSN: 1089-7798
4. S. Sharma, K. Deka, Y. Hong and **D. Dixit**, "Intelligent reflecting surface-assisted uplink SCMA system," *IEEE Communications Letters,* vol. 25, no. 8, pp. 2728-2732, Aug. 2021. Impact Factor=4.4, ISSN: 1089-7798
5. **D. Dixit**, N. Kumar, S. Sharma, V. Bhatia, S. Panic and C. Stefanovic, "On the ASER performance of UAV-based communication systems for QAM schemes," *IEEE Communications Letters,* vol. 25, no. 6, pp. 1835-1838, Jun. 2021. Impact Factor=4.4, ISSN: 1089-7798

6. **D. Dixit** and P. R. Sahu, "Performance of regenerative relay assisted D2D communication in mixed fading channels," *IEEE Communications Letters,* vol. 22, no. 4, pp. 864-867, Apr. 2018. Impact Factor=4.4, ISSN: 1089-7798
7. **D. Dixit** and P. R. Sahu, "Exact closed-form ABER for multi-hop regenerative relay systems over κ-μ fading," *IEEE Wireless Communications Letters,* vol. 6, no. 2, pp. 246-249, Apr. 2017. Impact Factor=5.5, ISSN: 2162-2337
8. **D. Dixit** and P. R. Sahu, "Performance analysis of rectangular QAM with SC receiver over Nakagami-m fading channels," *IEEE Communications Letters,* vol. 18, no. 7, pp. 1262-1265, Jul. 2014. Impact Factor=4.4, ISSN: 1089-7798
9. **D. Dixit** and P. R. Sahu, "Performance of QAM signaling over TWDP fading channels," *IEEE Transactions on Wireless Communications* vol. 12, no. 4, pp. 1794-1799, Apr. 2013. Impact Factor=10.7, ISSN: 1536-1276
10. **D. Dixit** and P. R. Sahu, "Performance of L-branch MRC receiver in η-μ and κ-μ fading channels for QAM signals," *IEEE Wireless Communications Letters,* vol. 1, no. 4, pp. 316-319, Aug. 2012. Impact Factor=5.5, ISSN: 2162-2337
11. **D. Dixit** and P. R. Sahu, "Symbol error rate of rectangular QAM with best-relay selection in cooperative systems over Rayleigh fading channels," *IEEE Communications Letters,* vol. 16, no. 4, pp. 466-469, Apr. 2012. Impact Factor=4.4, ISSN: 1089-7798

- **Papers Published in the Wiley Journals: (#11)**

1. R. K. Hindustani, **D. Dixit**, and S. Sharma "On the performance of multiple-IRS aided wireless networks over Nakagami-m fading channels, " *Wiley International Journal of Communication Systems (IJCS)*, vol. 37, no. 18, pp. 1-14, Aug. 2024. Impact Factor=1.8, ISSN: 1099-1131
2. R. K. Singh, S. Das, **D. Dixit**, and N. Kumar, "Performance analysis of energy harvesting-enabled relay networks in κ-μ fading channels" *Wiley Transactions on Emerging Telecommunications Technologies (ETT)* vol. 35, no. 4, pp. 1-21, Apr. 2024. Impact Factor=2.5, ISSN: 2161-3915
3. S. Chatterjee, **D. Dixit**, N. Kumar, P. K. Verma, and P. Pandey"Exact analysis of two-branch SC receiver over α-κ-μ fading" *Wiley Internet Technology Letters* vol. 6, no. 6, pp. 1-5, Nov. 2023. Impact Factor=1.5, ISSN: 2476-1508.
4. S. K. Bhagat, **D. Dixit**, and P. R. Sahu "Average bit error probability performance of intelligent reflecting surface-aided wireless communications over Hoyt fading" *Wiley International Journal of Communication Systems (IJCS)*, vol. 39, no. 16, pp. 1-12, Nov. 2023. Impact Factor=1.8, ISSN: 1099-1131.
5. R. K. Singh, N. Kumar, and **D. Dixit** "On the performance of energy harvesting-assisted Nth-best relay cooperative networks in Nakagami-m Fading" *Wiley International Journal of Communication Systems (IJCS)*, vol. 36, no. 15, pp. 1-21, Oct. 2023. Impact Factor=1.8, ISSN: 1099-1131
6. R. K. Hindustani, **D. Dixit**, and S. Sharma "Outage probability analysis of multiple intelligent reflecting surface-assisted single-input single-output system with switched diversity." *Wiley International Journal of Communication Systems (IJCS)*, vol. 36, no. 14, pp. 1-15, Sep. 2023. Impact Factor=1.8. ISSN: 1099-1131
7. S. Sharma, K. Deka, **D. Dixit**, and A. Rajesh "Intelligent reflecting surface-assisted downlink nonorthogonal multiple access systems" *Wiley International Journal of Communication Systems (IJCS)*, vol. 35, no. 3, pp. 1-12, Feb. 2022. Impact Factor=1.8, ISSN: 1099-1131
8. S. Bhatnagar, **D. Dixit**, S. K. Gauttam, and D. Rawal "Performance of new relay selection scheme for buffer-assisted multi-hop DF networks" *Wiley International Journal of Communication Systems (IJCS)*, vol. 35, no. 1, pp. 1-13, Jan. 2022. Impact Factor=1.8, ISSN: 1099-1131
9. **D. Dixit** and P. R. Sahu "Performance of multihop detect-and-forward relaying system over fluctuating two-ray fading channels" *Wiley Transactions on Emerging Telecommunications Technologies (ETT)* vol. 29, no. 8, pp. 1-14, May 2018. Impact Factor=2.5, ISSN: 2161-3915
10. **D. Dixit** and P. R. Sahu, "Error rate and outage of dual-hop DF relay system with selection combining over Rice fading," *Wiley International Journal of Communication Systems (IJCS)*, vol. 31, no. 13, pp. 1-14, Jun. 2018. Impact Factor=1.8, ISSN: 1099-1131
11. **D. Dixit** and P. R. Sahu "Performance of dual-hop DF relaying systems with QAM schemes over mixed η-μ and κ-μ fading channels" *Wiley Transactions on Emerging Telecommunications Technologies (ETT)* vol. 28, no. 11, pp. 1-13, Apr. 2017. Impact Factor=2.5, ISSN: 2161-3915



- **Papers Published in the Elsevier Journals: (#6)**

1. S. Das, N. Kumar, and **D. Dixit**, "On the performance of dual-hop mixed THz-RF cooperative relay networks" *Elsevier Physical Communication*, vol. 68, pp. 102543, Feb. 2025. Impact Factor=2.2, ISSN: 1874-4907
2. H.K. Sahu, A.K. Padhan, B. Das, and **D. Dixit** "BER performance of smart grid HAN with RF energy harvesting over RF-THz channel" *Elsevier International Journal of Electronics and Communications (AEU)* vol. 178, pp. 1-10, May 2024. Impact Factor=3.2, ISSN: 1434-8411
3. R. K. Hindustani, **D. Dixit**, S. Sharma, and V. Bhatia "Outage probability of multiple-IRS-assisted SISO wireless communications over Rician fading" *Elsevier Physical Communication*, vol. 59, pp. 1-8, May 2023. Impact Factor=2.2, ISSN: 1874-4907
4. R. K. Singh, N. Kumar, and **D. Dixit** "On the ASER performance of RF energy harvesting multiple relay networks" *Elsevier Physical Communication*, vol. 54, pp. 1-8, Oct. 2022. Impact Factor=2.2, ISSN: 1874-4907
5. **D. Dixit**, N. Kumar, and A. K. Mandupra "On the ASER performance of SC receiver with RQAM and HQAM over κ-μ fading" *Elsevier International Journal of Electronics and Communications (AEU)* vol. 138, pp. 1-6, Aug. 2021. Impact Factor=3.2, ISSN: 1434-8411
6. N. Kumar, V. Bhatia, and **D. Dixit** "Performance analysis of QAM in amplify-and-forward cooperative communication networks over Rayleigh fading channels" *Elsevier International Journal of Electronics and Communications (AEU)* vol. 72, pp. 86-94, Feb. 2017. Impact Factor=3.2, ISSN: 1434-8411

Conference Papers: (#7)

1. R. K. Hindustani, S. Sharma and **D. Dixit**, "Joint Symbol and ToA Estimation in RIS-Assisted UWB Indoor Localization," in *IEEE International Conference on IoT, Communication and Automation Technology (ICICAT)*, Gorakhpur, India, 2023, pp. 1-5.

2. R. K. Singh, S. Das, **D. Dixit** and N. Kumar, "Outage Probability Analysis of Energy Harvesting-Enabled Three-Phase Two-Way Relaying System Over Mixed Fading Channels," in *IEEE International Conference on IoT, Communication and Automation Technology (ICICAT)*, Gorakhpur, India, 2023, pp. 1-5.

3. **D. Dixit**, P. Pandey, P. K. Verma, D. Sigroha and D. K. Tripathi, "New exact ABER for MRC receiver in κ-μ faded channels," in *IEEE International Conference on IoT, Communication and Automation Technology (ICICAT)*, Gorakhpur, India, 2023, pp. 1-5

4. S. Sharma, **D. Dixit**, and K. Deka, "Deep learning based symbol detection for molecular communications," in *Proc. IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS)*, IIIT Delhi 2020, pp. 1-6

5. **D. Dixit**, P. R. Sahu, and George K. Karagiannidis, "Error rate of MIMO OSTBC systems over mixed Nakagami-m/ Rice fading channels," in *Proc. IEEE 24th National Conference on Communications (NCC)*, IIT, Hyderabad, India, Feb. 2018, pp. 1-5.

6. **D. Dixit** and P. R. Sahu, "Outage probability of cooperative relay networks in η-μ, κ-μ, and mixed fading channels," in *Proc. IEEE 86th Vehicular Technology Conference (VTC-Fall)*, Toronto, Canada, September 2017, pp. 1-5.

7. **D. Dixit** and P. R. Sahu, "Performance of multihop communication systems with regenerative relays in η-μ fading channels," in *Proc. IEEE 79th Vehicular Technology Conference (VTC-Spring)*, Seoul, South Korea, May 2014, pp. 1-5.