

FACULTY PROFILE

Name of Teaching Staff / RMK ID	Dr Subash T D / T1246			
Designation	Professor			
Department	Electronics and Communication Engineering			
Date of Joining the Institution	03.07.2026			
Qualifications	B.E (Electronics & Communication Engineering)	M.E (Embedded System Technologies)	PhD (Electrical Engineering)	
Total Experience	Overall: 17		in RMK: Nil	
Papers Published in Journal	Overall: 88		After Joining RMK: 2	
List of Papers Published	Papers Published in SCI Indexed Journals: 1. B. Nakarmi, S. M. R. Islam, S. Zhijie, I. A. Ukaegbu, A. Ashimbayeva, C. Molardi, T. D. Subash, M. R. C. Beson & S. Pan, 2026, “Target Detection Using Photonics-Driven Robust Waveforms in Interference-Prone Radar Networks”, <i>IEEE Transactions on Microwave Theory and Techniques (IEEE Transactions)</i>, Vol. 257, Issue No. 5 pp. 124642 - 124657, ISSN: 0018-9480 (Impact Factor – 4.5 SCI Indexed) - (Co-author) 2. T D Subash, R Ganesh Babu, Vimala Josphine & Subha T D, 2026, “Optimization of Absorber Layer Thickness and for Enhanced Efficiency and Stability in Lead-free Perovskite/Silicon Tandem Solar Cells”, <i>Renewable Energy (Elsevier)</i>, Vol. 257, Issue No. 5 pp. 124642 - 124657, ISSN: 0960-1481 (Impact Factor - 9.1 SCI Indexed) - (First & Corresponding author)			

	3. T D Subash, Devi Arumugam, Vijayalakshmi S, Subha T D & Yun Gao, 2026, “Optimized Three-Layer Carbon Electrode Architecture for High-Performance CsPbI₃ Perovskite Solar Cells”, <i>Progress in Photovoltaics: Research and Applications (Wiley)</i>, Vol. 257, Issue No. 5 pp. 124642 - 124657, ISSN: 1062-7995 (Impact Factor - 7.6 SCI Indexed) - (First & Corresponding author) 4. Jeepa K J, Rajeeesh J, T D Subash, Gayathre Lakshmi M, Acchutharaman K R, Senthil Pandian M, Ismail Fathima M & T D Subha, 2025 “Investigation of Magnesium-doped TiO₂ for Economical Perovskite Solar Cells”, <i>Ceramics International (Elsevier)</i>, Vol. 51, Issue No. 5, pp. 49285 – 49294, ISSN: 0272-8842 (Impact Factor - 5.6 SCI Indexed) - (Corresponding author) 5. T D Subash, R Ganesh Babu, Pradeep K R, Subha T D & Yun Gao, 2026, “Deep Learning-Based Phase Noise Mitigation in FMCW LiDAR Sensors for Precise Distance Measurement during Sweeping”, <i>IETE Journal of Research (Taylor & Francis)</i>, Vol. 141, Issue No.3, pp. 729 - 736, ISSN: 0974-780X (Impact Factor – 1.5 SCIE Indexed) - (First & Corresponding author) 6. T D Subash, M Sukanya, D Haripriya, K Saranya, Balaji S R & Samuthira Pandi V, 2026, “Development of an Intelligent Framework for Photocatalytic CO₂ Reduction to CH₄ with Enhanced Selectivity Using 3D/2D Perovskite Bilayer Composites”, <i>Journal of Materials Science: Materials in Electronics (Springer)</i>, Vol. 37, Issue No. 05, pp. 1272-1 - 1272-19, ISSN: 0957-4522 (Impact Factor - 2.9 SCI Indexed) - (First & Corresponding author) 7. T D Subash, Devi Arumugam, Naresh Kumar Thapa K, Subha T D & Yun Gao, 2026, “Surface Modification of Perovskite Solar Cells Using Organic Dyes for Enhanced Efficiency and Moisture Stability”, <i>Journal of Electronic</i>
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	Materials (Springer), Vol. 57, Issue No. 3, pp. 6453 - 6465, ISSN: 0361-5235 (Impact Factor - 2.5 SCI Indexed) - (First & Corresponding author) 8. Lalitha S.D, T D Subash, & T.D. Subha, 2026, “An Advanced Micro-Expression Recognition Framework Utilizing Optimized Gegenbauer Graph Neural Network for Accurate Hidden Emotion Classification Based on Facial Movements International Journal of Pattern Recognition and Artificial Intelligence”, <i>Knowledge-Based Systems (World Scientific)</i>, vol.341, no.04, pp. 115665 - 115669, ISSN: 0218-0014, Impact Factor: 1.1 (SCI Indexed) (Co-author) 9. M Shakunthala, T.D. Subha, A. Anna Lakshmi & T D Subash, 2026, “Automated brain stroke detection in magnetic resonance imaging using self-modulating convolutional neural networks for enhanced ischemic and hemorrhagic stroke classification”, <i>Knowledge-Based Systems (Elsevier)</i>, vol.341, no.04, pp. 115665 - 115669, ISSN: 0950 - 7051, Impact Factor: 7.6 (SCI Indexed) (Co-author) 10. T D Subash, R Ganesh Babu, D Loganathan, Subha T D & Zhongyan Huo, 2026, “Advanced Target Detection Strategy Using a Hybrid Multiplexing Photonic Radar System for Resilient and Intelligent Autonomous Vehicle Operation in 5G Communication Environments”, <i>International Journal of Pattern Recognition and Artificial Intelligence (World Scientific)</i>, Vol. 257, Issue No. 5 pp. 124642 - 124657, ISSN: 0218-0014 (Impact Factor - 1.1 SCI Indexed) - (First & Corresponding author) 11. Algerim Ashimbayeva, S. Zhijie, M. R. C. Beson, T D Subash, Ikechi Augustine Ukaegbu, Shilong Pan, Carlo Molardi & Bikash Nakarmi, 2026, “Linewidth Enhancement of Range Profile in Multi-Chirp Radar via
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	Beat Signal Chirp and Phase Normalization” <i>IEEE Access (IEEE)</i>, Vol. 13, pp. 24080-24090, ISSN: 2169-3536 DOI: 10.1109/ACCESS.2025.3535472 (Impact Factor - 3.9 SCI Indexed) (Co-author) 12. T D Subash, T D Subha & M. Batumalay, 2026, “Enhancing Charge Transport and Stability in Perovskite Solar Cells Through Kbt-Modified Titanium Dioxide Electron Transport Layers”, <i>Current Nanoscience (Bentham Science)</i>, vol.21, no.04, pp.1-8, ISSN: 1875-6786, Impact Factor: 1.5 (SCI Indexed) (First & Corresponding author) 13. S. Muthumarilakshmi, D.Hemanand, R.Ganesh Babu & T D Subash, 2026, “AI-Based Tuberculosis Detection and Localization in Chest X-Rays Using a Binarized Simplicial Convolutional Neural Network for Efficient and Accurate Diagnosis Biomedical Signal Processing and Control”, <i>Biomedical Signal Processing and Control (Elsevier)</i>, vol.113, no.04, pp.108928 - 108944, ISSN: 1746-8094, Impact Factor: 4.9 (SCI Indexed) (Co-author) 14. T D Subash, Sun Zhijie, C. B. M. Rashidi, Rezwanul Islam S M, Ukash Nakarmi, Ikechi Augustine Ukaegbu & Bikash Nakarmi 2025, “Efficient Back-projection Technique for Multiple Objects Detection and 2D Imaging through Photonics-based LFM Radar”, <i>IEEE Access (IEEE)</i>, Vol. 13, Issue No. 5, pp. 181477 - 181486, ISSN: 2169-3536 Digital Object Identifier: 10.1109/ACCESS.2025.3622227 (Impact Factor - 3.9 SCI Indexed) - (First author) 15. T D Subash, N Janaki Manohar, Alwin Vinifred Christopher & Subha T D, 2025, “Enhancing Channel Estimation and Efficiency in Millimeter-Wave Massive Multiple Input Multiple Output Systems by Exploiting Reconfigurable Intelligent Surface and Gegenbauer
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	Graph Neural Networks for High-Resolution Signal Reconstruction”, <i>International Journal of Communication Systems (Wiley)</i>, Vol. 12, Issue No. 5, pp. 145643 - 145649, ISSN: 1074-5351 (Impact Factor - 1.7 SCI Indexed) - (First & Corresponding author) 16. Bikash Nakarmi, S M Rezwanul Islam, Hum Nath Parajuli, Ikechi Augustine Ukaegbu, Algerim Ashimbayeva, Carlo Molardi, T D Subash, Xiangchuan Wang & Shilong Pan, 2025, “Target Detection Using Fused Unidentical Photonics-based LFM Sub-band Radar signals with an Adaptive Feed Forward Network Equalizer” <i>IEEE Access (IEEE)</i>, Vol. 13, pp. 24080-24090, ISSN: 2169-3536 DOI: 10.1109/ACCESS.2025.3535472 (Impact Factor - 3.9 SCI Indexed) (Co-author) 17. T D Subha, T D Subash, Lalitha S D & Shobana J, 2025, “Optimizing the Efficiency of Perovskite Solar cells for Improved Performance and Energy Conversion Using Temporal Dynamic Graph Neural Network”, <i>Journal of Computational Electronics (Springer)</i>, pp.1-12, vol. 146, no. 24 ISSN: 1569-8025 (Impact Factor - 2.2 SCI Indexed) (Co-author) 18. K J Jeepa, T D Subash, Joseph Wilson & Ajayan J, 2024, “Optimization of Lead Free Cs₂TiBr₆ Green Perovskite Solar Cell for Future Renewable Energy Applications”, <i>Current Nanoscience (Bentham Science)</i>, vol.21, no.04, pp.1-8, ISSN: 1875-6786, Impact Factor: 1.5 (SCI Indexed) (Co-author) 19. T D Subha, C Arunachala Perumal, T D Subash & K J Jeepa, 2022, “A hybrid technique employed for efficiency improvement of tandem perovskite solar cell”, <i>Journal of Progress in Photovoltaics: Research and Applications (Wiley)</i>, vol.1, no.20, pp.1-8, ISSN: 1062-7995, Impact Factor: 8.4 (SCI Indexed) (Co-author)
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20. Rittam Dutta, **T D Subash** & Nitai Patiya, 2021, “Improved DC Performance Analysis of a Novel Asymmetric Extended Source Tunnel FET (AES-TFET) for Fast Switching Application”, *Journal of Silicon (Springer)*, vol.7, no.3, pp.886-894, ISSN: 1876-990X, Impact Factor: 1.4 (**SCI Indexed**) (**Co-author**)
21. Rittam Dutta, **T D Subash** & Nitai Patiya, 2021, “DC Performance Analysis of III-V/Si Heterostructure Double Gate Triple Material PiN Tunneling Graphene Nanoribbon FET Circuits with Quantum Mechanical Effects”, *Journal of Computational Electronics (Springer)*, vol.10, no.6, pp.7886 - 7898, ISSN: 1569 - 8025, Impact Factor: 1.5 (**SCI Indexed**) (**Co-author**)
22. Eugene Peter, **T D Subash**, T D Subha & Alsufiyan Nazim, 2020 “Utilizing Radiant Nanoparticles in Silicon for Balanced White Color Adapters”, *Journal of Silicon (Springer)*, vol.11, no.5, pp. 00633 - 00639, ISSN: 1876-990X, Impact Factor: 3.3 (**SCI Indexed**) (**Corresponding author**)
23. Bibin Vincent, Aswathy S U, **T D Subash** & T D Subha, 2020, “A Novel Approach to White Light Radiation From Silicon Based Tunnel Junction LEDs”, *Journal of Silicon (Springer)*, vol.10, no.4, pp. 00671 - 00682, ISSN: 1876-990X, Impact Factor: 3.3 (**SCI Indexed**) (**Corresponding author**)
24. S. Perumal Sankar, **T D Subash**, N. Vishwanath & Deepa Elizabeth Geroje, 2020, “Security Improvement in Block Chain Technique enabled Peer to Peer Network”, *Peer-to-Peer Networking and Applications (Springer)*, vol.10, no.3, pp. 00971-00982, ISSN: 1936-6450, Impact Factor: 2.7 (**SCI Indexed**) (**Co-author**)

25. Rittam Dutta, **Subash, T D** & Nitai Paitya, 2020, "InAs/Si Hetero-junction channel to enhance the performance of DG-TFET with Graphene Nanoribbon: An Analytical Model", *Journal of Silicon (Springer)*, vol.37, no.8, pp. 062201-1-062201-7, ISSN: 1876-990X, Impact Factor: 3.3 (**SCI Indexed**) (**Co-author**)
26. Rittam Dutta, Nitai Paitya & **Subash, T D**, 2020, "Electric field and Surface Potential Analytical Modeling of Novel Double Gate Triple Material PiN Tunneling Graphene Nano Ribbon FET (DG-TM-PiN-TGNFET)", *Journal of Silicon (Springer)*, vol.37, no.6, pp. 042201-1-042201-7, ISSN: 1876-990X, Impact Factor: 3.3 (**SCI Indexed**) (**Co-author**)
27. Ajayan, J, Nirmal D, Dheena Kurian, Mohankumar P, Arivazhagan L, Augustine Fletcher AS, **Subash, T D** & Saravanan M, 2019, "Investigation of Impact of Gate Underlap/Overlap on the Analog/RF Performance of Composite Channel Double Gate MOSFETs", *Journal of Vacuum Science & Technology B, (AIP)*, vol.37, no.6, pp. 062201-1-062201-7, ISSN:2166-2746, Impact Factor: 1.5 (**SCI Indexed**) (**Co-author**)
28. Ajayan, J, **Subash, T D** & Dheena Kurian, 2017, "20nm High Performance Novel MOSHEMT on InP Substrate for Future High speed low power Applications", *Superlattices and Microstructures (Elsevier)*, vol.109, no.1, pp. 183 - 193, ISSN:0749-6036, Impact Factor: 3.2 (**SCI Indexed**) (**Co-author**)
29. **Subash, T D**, Gnanasekaran, T & Freeda, M, 2016, "Synthesis of ZrO₂ Nanoparticle and Design of HEMT Devices", *Integrated Ferroelectrics (Taylor*

	& Francis), vol.176, no.1, pp. 132-139, ISSN:1058-4587, Impact Factor: 0.7 (SCI Indexed) (First & Corresponding author) 30. T D Subash, T.Gnanasekaran, C.Divya & J.Jagannathan, 2014, “Design and Simulated Characteristics of Nanosized InSb Based Heterostructure Devices”, <i>Journal of Advances in Material Science and Engineering</i>, (Wiley), vol.1, no.1, pp. 1-8, ISSN: 1687-8434 Impact Factor – 2.9 (SCI Indexed) (First & Corresponding author) Papers Published in SCImago, Scopus Indexed Journals: 1. Jeepa K J, Rajeesh J, T D Subash, Akshara Babu, Abhijith M, Akhila Raj & Chinchu Anna Varkey, 2026 “Analyzing the Performance of CZTGS/CZTS Tandem Solar Cell Theoretically using SCAPS- 1D” in the Springer Series – Lecture Notes in Electrical Engineering (SCOPUS indexed) 2. Chelsey C. Y. Hang, M. Batumalay, T D Subash, R. Thinakaran & B. Chitra, 2024, “Blockchain-based IoT-based Health Monitoring App: Lowering Risks and Improving Security and Privacy”, International Journal of Advanced Computer Science and Applications (IJACSA), Vol. 15, Issue. No. 6, pp.1009– 1014, ISSN: 2156-5570. (Scopus Indexed) 3. Naeema Nazar & T D Subash, 2024, “Navigated Augmented Realities: A Review of Advancements, Applications and Future prospects”, Educational Administration: Theory and Practice Journal, Vol. 30, Issue. No. 4, pp.S186 – S188, ISSN: 1300-4832. (Scopus Indexed)
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	4. Anjana G, T D Subash & Malathy Batumalay, 2023, “SCAPS-1D simulation of CIGS-based solar cells with CdS as Buffer layer”, Nanoworld Journal, Vol. 09, Issue. No. 05, pp.S186 – S188, ISSN: 2379-1101. (Scopus Indexed) 5. Arya Krishnan & T D Subash, 2023, “Simulation of NiOx based solar cells using SCAPS Software”, Nanoworld Journal, Vol. 09, Issue. No. 05, pp.S143 – S148, ISSN: 2379-1101. (Scopus Indexed) 6. Eugene Peter & T D Subash, 2023, “Nanotechnology Approach for Improving the Quantum Efficiency in White Light Emitting Diodes”, Nanoworld Journal, Vol. 09, Issue. No. 05, pp.S86 – S90, ISSN: 2379-1101. (Scopus Indexed) 7. Hima K, T D Subash & Malathy Batumalay, 2023 “Simulation of CIS/ZnO/TiO₂ solar cell and optimization using SCAPS”, Nanoworld Journal, Vol. 09, Issue. No. 05, pp.S81 – S85, ISSN: 2379-1101. (Scopus Indexed) 8. Indu Chandran, T D Subash & Malathy Batumalay, 2023 “Simulation and optimization of ZnO/CuO/Cds solar cell using SCAPS”, Nanoworld Journal, Vol. 09, Issue. No. 05, pp. S97 – S100, ISSN: 2379-1101. (Scopus Indexed) 9. Jeepa K J, T D Subash & Joseph Wilson, 2023“Comparing the performance of lead based and Lead free Inorganic perovskite solar cell using SCAPS-1D”, Nanoworld Journal, Vol. 09, Issue. No. 05, pp.S106 – S108, ISSN: 2379-1101. (Scopus Indexed)
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10. W.Y. Leong & **T D Subash**, 2023, "Nanotechnology Based Building Fire Safety Using Artificial Intelligent Facilities System", **Nanoworld Journal**, Vol. 09, Issue. No. 05, pp. S119 – S124, ISSN: 2379-1101. **(Scopus Indexed)**
11. Reshma & **T D Subash**, 2023, "Simulation of Perovskite Based Solar Cell Using SCAPS Software", **Nanoworld Journal**, Vol. 09, Issue. No. 05, pp. S86 – S90, ISSN: 2379-1101. **(Scopus Indexed)**
12. Rahul, **T D Subash** & Malathy Batumalay, 2023, "SCAPS-1D simulation of Inverted Planar Perovskite Solar Cell with SnO₂ as window layer", **Nanoworld Journal**, Vol. 09, Issue. No. 05, pp. S195 – S197, ISSN: 2379-1101. **(Scopus Indexed)**
13. Walid Tawfik & **T D Subash**, 2023, "Utilization of Nanographene Oxide(NGO)-FOLIC ACID (FA)-Metal Chalcogen in Cancer Theranostics", **Nanoworld Journal**, Vol. 09, Issue. No. 05, pp. S206 – S214, ISSN: 2379-1101. **(Scopus Indexed)**
14. Sonu Sunil & **T D Subash**, 2023, "Hydrogen Solar Electric Vehicle: A Review", **Nanoworld Journal**, Vol. 09, Issue. No. 05, pp. S198 – S201, ISSN: 2379-1101. **(Scopus Indexed)**
15. Preethi Sebastian, **T D Subash** & Usha Nair, "State-of-The-Art Techniques for LVRT Enhancement using Artificial Intelligence Methods", **European Chemical Bulletin**, Vol. 12, Issue. No. 12 (2023), pp. 521 - 542, ISSN: 2063 - 5346. **(Scopus Indexed)**
16. Nima Madhavan & **T D Subash**, "Advanced Solar Tree with Sun tracking and Cleaning Technology",

	Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3938 - 3943, ISSN: 2262 - 2269. (Scopus Indexed) 17. Jeepa K J, T D Subash & Anjaly V, “Solar powered Two-level cascaded Interlaced Step-up DC-DC Converter with MPPT”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3938 - 3943, ISSN: 2262 - 2269. (Scopus Indexed) 18. Lekshmi S Kumar & T D Subash, “Gi-Fi Technology”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3938 - 3943, ISSN: 2262 - 2269. (Scopus Indexed) 19. Jisha V T, T D Subash, Sajikumar A C & Shyju G J 2021, “Structural, Optical and Thermal Properties of SrAl₄O₇:Pr Nanophosphors”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3938 - 3943, ISSN: 2262 - 2269. (Scopus Indexed) 20. Cyril Sebastian & T D Subash, 2021 “Application of Electric Springs in Fuel Cells”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3938 - 3943, ISSN: 2262 - 2269. (Scopus Indexed) 21. Nandhu S Gopal & T D Subash, 2021 “Modified Solar Generating Panel for High Efficiency Solar Power Station – Using Temperature Study”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3948 - 3952, ISSN: 2262 - 2269. (Scopus Indexed) 22. T Suresh, T D Subha, Surendra Kumar C & T D Subash, 2021 “A Study of Novel Technique-Solar
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	Powered Bicycle”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3601 - 3608, ISSN: 2262 - 2269. (Scopus Indexed) 23.N Elezabeth Rani, P Janani, T D Subha & T D Subash, 2021 “Ethernet interaction at wave Propagation of millimeters”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3572 - 3579, ISSN: 2262 - 2269. (Scopus Indexed) 24.P Janani, N Elezabeth Rani, T D Subha & T D Subash, 2021 “Analysis of Acute Myocardial Infraction Diagnosis”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3554 - 3561, ISSN: 2262 - 2269. (Scopus Indexed) 25.P Janani, N Elezabeth Rani,T D Subha,T D Subash, 2021 “The Role of Nano-Communication in biomedical Application and Research”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3534 -3539, ISSN: 2262 - 2269. (Scopus Indexed) 26.A Swetha Reddy,T D Subha, T Suresh &T D Subash, 2021 “A DTM Research based on the Strategic Process”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3502 - 3510, ISSN: 2262 - 2269. (Scopus Indexed) 27.T D Subha, J Sworna Jo Lijha, Gokulraj & T D Subash, 2021 “Radical Low-Slung Influence 12-Bit SAR ADC”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3626 - 3631, ISSN: 2262 - 2269. (Scopus Indexed)
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	28. T D Subha, C Arunachalaperumal & T D Subash, 2021 “Non linear adaptive Smart antenna resource Management for 5G through to Surveillance systems”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3562 - 3571, ISSN: 2262 - 2269. (Scopus Indexed) 29. T D Subha, T D Subash & T.Suresh, 2021 “The Importance for Nanostructures in N-I-P Ambiguously defined Si Periodic Concentrated Solar Devices”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.1214 - 1218, ISSN: 2262 - 2269. (Scopus Indexed) 30. T D Subha, T Suresh, T D Subash & Swetha Reddy A, 2021 “Review on some kind of new process of Restructuring the automotive process”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3587 - 3590, ISSN: 2262 - 2269. (Scopus Indexed) 31. T D Subha, G Gokul Raj, J Sworna Jo Lijha & T D Subash, 2021 “A Study on Single Frequency Network on High Speed Train”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3591 -3596, ISSN: 2262 - 2269. (Scopus Indexed) 32. T D Subash, T D Subha, I Titus, Alsufiyan Nazim & Eugene Peter, 2021, “COVID 19 an Infectious Disease Influenced in Modern Era-Recent Survey in India”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3516 - 3525, ISSN: 2262 - 2269. (Scopus Indexed) 33. Ritam Dutta, T.D. Subash & Nitai Paitya, 2021, “Extended Gate with Source Splitted Tunnel Field
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	Effect Transistor for Improved Device Performance”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3721 - 3725, ISSN: 2214 - 7853. (Scopus Indexed) 34. T D Subash, T D Subha, Alsufiyan Nazim & T Suresh, 2021, “Enhancement of Remote Monitoring Implantable System for Diagnosing Using IoMT”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3549-3553, ISSN: 2214 - 7853. (Scopus Indexed) 35. T D Subash, Nehnu Basheer, Sreelakshmi K S, Arathy Jayaprakash & Linda Mathai, 2021, “Autonomous Public Transportation System”, Materialstoday:Proceedings (Elsevier), Vol. 43, Issue.P6(2021), pp.3487-3492, ISSN: ISSN: 2214 - 7853. (Scopus Indexed) 36. Eugene Peter & T D Subash, 2020, “Synthesis of Red-Emitting CdSe/CdS/ZnS Core/Shell/Shell Quantum Dots”, Materialstoday:Proceedings (Elsevier), Vol.24, Issue.P4(2020), pp.2162-2166, ISSN:2214-7853. (Scopus Indexed) 37. M Freeda & T D Subash, 2020, “Photoluminescence investigations of Ytterbium doped Calcium Aluminate nanophosphor synthesized by sol-gel technique (CaAl₂O₄: Yb)”, Materialstoday:Proceedings (Elsevier), Vol.24, Issue.P4(2020), pp.2167-2174, ISSN:2214-7853. (Scopus Indexed) 38. Cissy Jose & T D Subash, 2020, “FPGA Implementation of Dynamic Power, Area Optimized, Reversible ALU For Various DSP Applications”, Materialstoday:Proceedings
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	(Elsevier), Vol.24, Issue.P3(2020), pp.2062-2071, ISSN:2214-7853. (Scopus Indexed) 39. Smitha Sunil & T D Subash, 2020, “A Novel Design for a Low-Power High-Speed Robust Supply-Gated-Sleep 6T SRAM Cell”, Materialstoday:Proceedings (Elsevier), Vol.24, Issue.P3(2020), pp.1973-1981, ISSN:2214-7853. (Scopus Indexed) 40. Kripa Ann Kurian, T D Subash & Eugene Peter, 2020, “A Closed Loop Model of Modified SEPDC Based High Set-up DC-DC Converter”, Materialstoday:Proceedings (Elsevier), Vol.24, Issue.P3(2020), pp.2080-2090, ISSN:2214-7853. (Scopus Indexed) 41. T D Subha, T D Subash, K.S Claudia Jane, D. Devadharsini & D L Francis 2020, “Study and Analysis of Suppress of Surface Wave Propagation in Microstrip Patch Antenna”, Materialstoday:Proceedings (Elsevier), Vol.24, Issue.P4(2020), pp.2432-2440, ISSN:2214-7853. (Scopus Indexed) 42. T D Subha, T D Subash, K.S Claudia Jane, D. Devadharsini & D L Francis 2020, “Autonomous Under Water Vehicle Based on Extreme Learning Machine for Sensor Fault Diagnostics”, Materialstoday:Proceedings (Elsevier), Vol.24, Issue.P4(2020), pp.2412-2420, ISSN:2214-7853. (Scopus Indexed) 43. T D Subha, T D Subash, N Elizabeth Rani & P Janani 2020, “Li-Fi: A Revolution in Wireless Networking”, Materialstoday:Proceedings
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	(Elsevier), Vol.24, Issue.P4(2020), pp.2421-2431, ISSN:2214-7853. (Scopus Indexed) 44. Akhil S Pradeep, Abin Rajan Joseph, Anto Jacob, Jayaraj P.S & T D Subash, 2020, “Intelligent Collision avoidance system for fishing boat”, Materialstoday:Proceedings (Elsevier), Vol.24, Issue.P4(2020), pp.2475-2479, ISSN:2214-7853. (Scopus Indexed) 45. Subash, TD, Ajayan, J & Subha, TD, 2017, “Performance Comparison of 64-bit Carry Look-Ahead Adders Using 32nm CMOS Technology”, Materialstoday:Proceedings (Elsevier), Vol.4, Issue.2PB(2017), pp.4153-4168, ISSN:2214-7853.(Scopus Indexed) 46. Freeda, M & Subash, TD, 2017, “Comparison of Photoluminescence studies of Lanthanum, Terbium doped Calcium Aluminate Nanophosphors ($\text{CaAl}_2\text{O}_4\text{:La}$, $\text{CaAl}_2\text{O}_4\text{:Tb}$) by sol-gel method”, Materialstoday:Proceedings (Elsevier), Vol.4, Issue.2PB(2017), pp.4302-4309, ISSN:2214-7853. (Scopus Indexed) 47. Freeda, M & Subash, TD, 2017, “Optical Characterization of Dysprosium doped Calcium Aluminate Nanophosphors ($\text{CaAl}_2\text{O}_4\text{:Dy}$) by sol-gel method”, Materialstoday:Proceedings (Elsevier), Vol.4, Issue.2PB(2017), pp.4290-4301, ISSN:2214-7853. (Scopus Indexed) 48. Freeda, M & Subash, TD, 2017, “Photoluminescence Studies of Terbium doped Calcium Aluminate Nanophosphors ($\text{CaAl}_2\text{O}_4\text{:Tb}$) synthesized by sol-gel method”, Materialstoday:Proceedings (Elsevier), Vol.4,
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Issue.2PB(2017), pp.4283-4289, ISSN:2214-7853. **(Scopus Indexed)**

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	54. T.D.Subash, T.Gnanasekaran, Ajitha & Rajeesha, 2015 “Design of Low Power Clock Gated Double Edge Triggered Flipflop”, <i>International Journal of Applied Engineering Research</i>, ISSN:10871090, Vol.10, No.2, pp. 1958-1962. (Scopus Indexed) 55. Nicelin Asha & T.D.Subash, 2015 “Intelligent Transportation System for Urban Environment”, <i>International Journal of Applied Engineering Research</i>, ISSN:10871090, Vol. 10, No.2, pp. 1894-1899. (Scopus Indexed) 56. T.D.Subash, T.Gnanasekaran & C.Divya, 2014 “Performance Analysis of InSb based QWFET for Ultra high Speed Applications”, <i>Journal of Semiconductors</i>, ISSN: 16744926, Volume 36, Issue 1. (Scopus Indexed) 57. T.D.Subash, T.Gnanasekaran, J.Jagannathan & C.Divya, 2014 “Relative Analysis of GaAs, InSb, InP using QWFET”, <i>Journal of Advanced materials Research</i>, ISSN: 10226680, vol: 984-985, pp.1080-1084. (Scopus Indexed) 58. T.D.Subash & T.Gnanasekaran, 2014 “Indium Antimonide based HEMT for RF Applications”, <i>Journal of Semiconductors</i>, ISSN: 16744926, Vol. 35, Issue: 11. (Scopus Indexed)	
Papers Presented in Conferences (Scopus / WoS indexed only)	Overall : 13	After Joining RMK :- Nil
Ph.Ds. / Projects Guided	Ph.Ds. Guided: 2	Student Projects Guided: 30
Books Published:	Count: 5	
	1. Guest Editor: Subash TD, Bikash Nakarmi & J. Ajayan - Title of Book: Laser and its Applications to Digital Photonics and Microwave Photonics,	

	Publisher: CRC Press Taylor & Francis Group, SCOPUS indexed (2026). 2. Book Chapter Edited: C.B.M Rashidi1, K.N.F. Ku Azir, A.J. Rupok, Subash TD, Md. Shamim Ahsan “Optimizing Flexible Cross Correlation (FCC) Code in SAC-OCDMA Networks: An Interference Alleviation Approach”, in book: Laser and its Applications to Digital Photonics and Microwave Photonics, Publisher: CRC Press Taylor & Francis Group, SCOPUS indexed (2026). 3. Guest Editor: T.D. Subash, J. Ajayan & Leong Wai Yie - Title of Book: Perovskite Solar Cell, Publisher: CRC Press Taylor & Francis Group, SCOPUS indexed (2025). Published on 27th August, 2025, ISSN: 9781032763132 Website link: https://www.routledge.com/Perovskite-Solar-Cells/Subash-Ajayan-Yie/p/book/9781032763132?srsId=AfmBOoriLlu403cTk5HJo7vb08Q6Cckwat7-xWWBc_SjLlpPaAO7GEI 4. Guest Editor: T.D. Subash, J. Ajayan & Wladek Grabinski - Title of Book: Organic and Inorganic Light Emitting Diodes: Reliability Issues and Performance Enhancement, Publisher: CRC Press Taylor & Francis Group, SCOPUS indexed (2023). Published on 19th June 2023, ISSN: 9781003340577 Website link: https://doi.org/10.1201/9781003340577 5. Book Chapter Edited: J. Ajayan & T.D. Subash, “Efficiency Enhancement Techniques in Flexible and Organic Light-Emitting Diode”, In book: Organic and Inorganic Light Emitting Diodes (pp.133-160) DOI:10.1201/9781003340577-7, Published on 19th June 2023, Website link: https://www.taylorfrancis.com/chapters/edit/10.1201/9781003340577-7/efficiency-enhancement-
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	techniques-flexible-organic-light-emitting-diodes-ajayan-subash	
Patents	Published Count : 4	Granted Count : 1
	1. A Multi modal Control System for Intelligent Wheelchairs and Method for Operating the Same, (Application No: 202441055266), Utility Patent Application Status: Submitted on June 2024 2. IoT Based Self-Charging E-Rickshaw for differently-abled Persons, (Application No: 387003-001), Design Application Status: Granted on 14th September 2023 3. A Multi Modal Control System for Intelligent Wheelchairs and method for operating the same (Application No: 202441055266 A), Published Date: 26th July 2024, The Patent Office Journal No. 30/2024 Dated 26/07/2024 Pg. No. 65038 Indian Patent Office 4. Industrial Internet of Things (IoT) System using Block Chain Technology and Improved Trust Evaluation Method (Application No: 202241012900), Published Date: 25th March 2022, The Patent Office Journal No. 12/2022 Dated 25/03/2022 Pg. No. 18093 Indian Patent Office 5. Vayuputhra - An IoT Based Flood Surveillance System (Application No: 202241020043), Published Date: 15th April 2022, The Patent Office Journal No. 15/2022 Dated 15/04/2022 Pg. No. 23887 Indian Patent Office	
Professional Memberships	Count : 6	

	Senior Member – Institute of Electrical and Electronics Engineers (IEEE), USA Membership Number: 92098190 since 2011 Member – Sakura Science Club, Japan Science and Technology Agency, Japan (Membership No: 18103007) since 2018 Member – International Engineering and Technology Institute (IETI), Hongkong. Membership Number: 2015090977 Member – International Association of Engineers (IAENG), Hongkong. Member of IAENG Society of Wireless Networks, Membership Number: 122231 Associate Member – Universal Association of Computer and Electronics Engineering (UACEE). (India, London, Australia, Hungary). Membership Number: AM1003653 Member- International Association of Computer Science and Information Technology (IACSIT), Singapore , Membership Number: 80346442
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Consultancy Projects Completed	Count : 3
Awards Received	Count :- 24
	• Elected Member – Board of Governors, IEEE Photonics Society, USA (2024 - 2026), Elected by Members-at-Large • Selected for the prestigious 2022 Chinese National Youth TALENT Project of the Government of China in recognition of academic and research excellence. • Fellowship received from Government of Japan to represent India for two weeks “Japan – Asia Youth Exchange Program in Science (SAKURA Science

	Exchange Program)” which is promoted by Japan Science and Technology Agency (JST) (2018) • IEEE MAS Publication Award 2026 from IEEE Madras Section, India • Chair – IEEE Greentronics Technical Committee – IEEE Smart Cities (2026 - 2028) • Commissioned as Lieutenant in the NCC, Indian Army Wing - 2022 • Ambassador - IEEE Council on RFID (2025 - 2027) • IEEE Volunteer Leadership Training (VoLT) Program Graduate – 2025 • IEEE Smart Village, SQRS Committee Member – Since 2026 • IEEE Smart Village, SARC Member – Project Monitoring Committee – Since 2026 • IEEE AI Coalition – Representative of IEEE Photonics Society (2026 - 2030) • Founding Chair, IEEE Engineering in Medicine and Biology Society Nanjing Section Chapter, China (2025 - 2026) • Founding Chair, IEEE Biometric Council Nanjing Section Chapter, China (2025 - 2026) • Founding Secretary, IEEE Photonics Society Nanjing Section Chapter, China (2025 - 2026) • Founding Chair - IEEE Photonics Society Madras India Chapter (2015 – 2020) • Founding Vice - Chair - IEEE Photonics Society India Chapter - Prakash Bharati. (2020 – 2022) • Global Strategy Representative for India, IEEE Photonics Society, USA (2021-2023) • IEEE Humanitarian Technologies Board (HTB) Project Monitoring Ad Hoc Committee Member 2023 – 2024
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	• Secretary - IEEE MAS Young Professionals, IEEE Madras Section, India (2014 - 2016) • Perennial Grant Award of INR. 1,75,000 under Unnat Bharat Abhiyan Scheme based on the performance in the year 2020, Ministry of Human Resource & Development (MHRD), Govt. of India • Under the leadership IEEE Photonics Society Madras India Chapter receives Most Innovative Chapter award for the year 2020 • Under the leadership IEEE Photonics Society Madras India Chapter receives Largest Membership increase award for the year 2019 • Under the leadership IEEE Photonics Society Madras India Chapter receives Chapter of the year 2017 Award • Best Electrical Engineering Project Award” for “Eco-Friendly Water Fueled Bike” in the National Level Technical Project Exhibition (2018) • State First in Fencing Championship 2004-2005
Research grants Received	1. Principal Investigator, AICTE- Research Promotion Scheme (RPS) Funded Research Project (2022): Investigation of High-Efficiency, Low-Cost Solar Cells for Space Applications; Grant Amount: INR 9.44 Lakhs; File No. 8-134/FDC/RPS/POLICY-1/2021-22; Status: Completed 2. Principal Investigator, IEEE EPICS in IEEE Funded Project (2026): Coastal Fog Harvesting for Sustainable Freshwater Supply; Funding Agency: IEEE; Grant Amount: USD 5,600; Status: Completed 3. Principal Investigator, Chinese National TALENT Scheme (Government of China, 2024–2026): Ph-RADAR and Mitigating Interferences in Multi-

	RADAR Environment; Grant No. JX6311062524; RMB 2 Lakhs; Status: Completed 4. Principal Investigator, TALENT Department (Government of China, 2024–2025): A Posture-Sensitive Voice Control System for Wheelchairs; Fund Sanctioned: RMB 5,000; Duration: 1 Year; Status: Completed 5. External Collaborator, Universiti Brunei Darussalam FIT Research Grant (2022–2025): Characterizing and Forecasting the Performance of Floating Solar Systems with Different PV Technologies under Bruneian Environment; Grant No. UBD/RSCH/1.3/FICBF(b)/2022/016; Funding Agency: Universiti Brunei Darussalam (UBD); Fund Sanctioned: B\$ 29,500 (Approx. INR 16.5 Lakhs); Duration: 3 Years; Status: Completed 6. Principal Investigator/Project Coordinator, Mangalam Educational Society, Ministry of New & Renewable Energy (MNRE), Government of India, and Agency for Non-Conventional Energy and Rural Technology (ANERT), Government of Kerala (2020): “Study and Installation of a 100 kW Solar Photovoltaic (PV) Power Plant”; Fund Sanctioned: INR 35.8 Lakhs; Plant Commissioned on 11th September 2020; Status: Completed 7. Principal Investigator, IEEE Humanitarian Activities Committee (HAC) & IEEE Special Interest Group on Humanitarian Technology (SIGHT) Special Call for Project Proposals (2020): “Portable Mechanical Ventilator”; Funding Agency: IEEE HAC & SIGHT; Fund Sanctioned: USD 5,000 (Approx. INR 3.79 Lakhs); Status: Completed
Orcid Link / ID	https://orcid.org/0000-0002-1993-5469

Google Scholar Link / ID	https://scholar.google.com/citations?user=4NOjatsAAAAJ
Vidwan Link / ID	https://vidwan.inflibnet.ac.in/profile/167383
Research Gate Link / ID	https://www.researchgate.net/profile/Td-Subash?ev=hdr_xprf
Scopus Link / ID	https://www.scopus.com/authid/detail.uri?authorId=8316314600
Publons ID:	https://publons.com/researcher/3823428/subash-td/
Web of Science Researcher ID:	<u>ABA-9894-2020</u>