INDEX TO DEFENCE SCIENCE JOURNAL, VOLUME 75, 2025

TITLE INDEX

- **2-**Bit Quad Band Reconfigurable Intelligent Surface for Modern Wireless Communications, 312
- A 28-GHz High-Gain Slotted Array Antenna with Beam Steering Capability for 5G Millimeter-Wave Applications, 215
- A Compact and Wide Beam Radiating Element for Electronically Steered Array Antenna, 597
- A Compact Dual-Band Linearly Co-Polarized Antenna Array System for In-Band Full-Duplex (IBFD) Applications, 339
- A Comprehensive Investigation of ESP32 in Enhancing Wi-Fi Range and Traffic Control for Defence Networks, 100
- A High Transmission Coefficient, Ultra-Low Noise and Wideband LNA for Use in Defence Applications, 588
- A Miniaturised Self-Multiplexing Antenna for Eight Distinct Sub-6 GHz 5G-NR Services for IoT Applications, 304
- A Portable Atomic Magnetometer with Pico-Tesla Sensitivity, 691
- A Study of Various Mitigation Strategies For RF Communications Blackout Phenomenon, 64
- Acoustic Modality in Passive Detection Technology, 10
- Advancements in Person Re-Identification Through Artificial Intelligence Techniques, 539
- Advances in Satellite Ranging Methods Towards Precise Orbit Determination, 141
- Aerodynamic Impacts of Convergent Slot Implementation on Hinged and Morphed NACA 0012 Airfoil Operating at a High Reynolds Number, 3
- An Application of Machine Learning in Empirical and Variational Mode Decomposition with SVM Classifier to Enhance Diagnostic Accuracy for Disease Detection in Soldier's Eyes, 44
- Analysis of Failure of Pin Locator for Internal Nose Cap of a Long Range Cruise Missile, 622
- Approximate Successive Cancellation Decoder for Polar Codes, 206
- Automated Classification of Military Aircraft Using Deep Neural Networks, 418
- Computational-Efficient Signal Processing Solution to Frequency Quadrupler Based High-Frequency VectorSignal Generator, 285
- Crowd Counting in Still Images for RoboSoldier: A Survey of Literature, 167
- Defence Locator Beacon: Integrating SHF Body-Wearable Antenna with Multifunctional Frequency Selective Surface, 90
- Design and Control of a Simplified NIBS PFC Converter Using Grasshopper-Optimized PI Controller for Battery Charging in Defence Applications, 352

- Design and Development of a Conjoined Narrow Wall Slotted Waveguide Array Antenna with Low Side Lobe Levels, 300
- Design and Development of an Electronically Controlled Polarization Agile Slotted Waveguide Array Antenna, 433
- Design and Development of Hardware-In-Loop Remote Simulation Real-Time Testbed with MIL-STD 1773-Based Fiber Optics Data Acquisition System, 111
- Design of a 3D Printed Helical Antenna having High Gain for 2.4 GHz ISM Band Applications, 325
- Design of Dynamic F-Function for Lightweight Block Ciphers, 531
- Design of Metamaterial Based Circularly Polarized Antenna for Anti-Drone Applications, 371
- Designing Simulation Logic of Cyber Operations on Physical Space Using C2 Effectiveness Measurement, 27
- Determination of Suitable Structural Characteristics of a Muzzle Device Improving the Stability of an Assault Rifle During Short Burst Firing, 740
- Dynamic Analysis of FG Shaft with SMA Supports, 257
- Effectiveness of Reinforcement and Lining in Concrete Target Impact Resistance, 645
- Enhanced LOFAR Detection Processing for Passive SONAR, 236
- Enhancing Digital Image Correlation with Adaptive Wavelets: Addressing Complex Deformations and Lorenz Noise, 426
- Enhancing Drilling Performance in Self-Healing Composites with Machine Learning Approaches, 615
- Enhancing MEMS Gyroscope Performance with Vertical Sense Mass Design, 756
- Entropy-Based Probabilistic Decision-Making Models for Industrial Robot Selection in Defence Systems, 556
- Evaluation of 'Design for Assembly' Performance of Undercut Finocyl Grain Casting Mandrels, 224
- Evaluation of the Head Trauma Safety For Low and High Cut Composite Ballistic Helmets Design, 159
- Experimental Evaluation of Fracture Models Parameters and its Validation for Naturally Aged CompositeSolid Propellant, 483
- Experimental Study on the Influence of Carbon Black Nano Particles on Ablative Properties of Carbon/Phenolic and Silica/Phenolic Composites, 463
- Experimental Validation of Remaining Useful Life of Electronic Boards in Complex Avionics Systems, 345
- Exploring Intra-Annual Variability in pH, Dissolved Oxygen and Thermo-Haline Properties: Acoustic Implications in the Central Arabian Sea, 714
- Finite Field-Based Three-Tier Cryptography Algorithm to Secure the Images, 52

- Hydrodynamic Modelling of Tides and Tidal Currents in Cochin Estuary, 677
- Influence of Climatic Events on Sea Level Variability over the Bay of Bengal: Insights from EOF Representation, 696
- Influence of Raster Angle and Infill Pattern on the Mechanical Performance of Additively Manufac-tured Carbon Fiber Composite, 629
- Interaction of Mid-to-High Frequency Acoustic Waves with a Sandy Riverbed – Estimation of Geoacoustic Parameters and Modelling of Transmission Loss, 657
- Inter-Annual Variability of Salinity in the Upper Layer of South Eastern Arabian Sea and Its Acoustic Relevance, 702
- Investigation on Short Carbon Fibre-Filled NBR Composites for Fabrication of Low-Frequency VibrationIsolator, 504
- Investigation on Structural and Thermal Analysis of Medium Calibre Cannon Gun Barrels, 523
- Investigations on Dual Band Filtering Antenna for Wireless Applications, 386
- Jamming Efficacy Analysis of Chaff using AI/ML, 273
- **K**-Nearest Neighbors (KNN) Regression as a Tool for Failure Rate Prediction of Si MOSFET, 769
- Ku Band Diplexer Antenna for Data Relay Satellite Uplink in ITU-R, 76
- Leveraging HDBSCAN, LSTM and R-DTW for Proactive Detection and Collision Prediction in MaritimeTraffic, 490
- Low Cross Polarized and Matching Improved Ground Extended Defected Structure Wearable Antenna for Tactical Battlefield Communications, 570
- Low-Loss, Compact DS-OCSRR Shaped DGS Loaded HMSIW Band Pass Filter with High Fractional Bandwidth, 394
- Machine Learning-Based Fault Analysis: Transforming Correlated Fault Data in Distributed Generation Systems, 603
- Measurement of Shake in the Camera in a Shelling Zone, 379 Microwave, Antenna and Communication (MAC 2024)-(Guest Editorial), 271
- Minimised Four-Port MIMO Antenna for Sub-6 GHz and Satellite Applications, 318
- ML-Driven Optimisation of Luneburg Lens Design, 293
- Modeling of Terrain Awareness and Warning System (TAWS) for Fixed-Wing Aircraft, 732
- MOP-N: A Hybrid AI Model for Automated Deployment of Guns in Dynamic Wargaming Scenario, 179
- Multidisciplinary Wing Layout Optimisation, 149
- Navigating the Future: A Comprehensive Review of Vessel Trajectory Prediction Techniques, 129
- Numerical Optimization of a Radial Inflow Turbine Based on a Loss Model of a Cryogenic Turboex-pander Using the Slime Mould Algorithm, 512
- Object Tracking-Based "Follow-Me" for Optionally Unmanned Ground Vehicles, 199

- Obstacle Prone Area Coverage by Swarm of Mobile Robots with Limited Visibility, 411
- OCEANVIZIO: A Dynamic and Scalable Visualization Tool for Comprehensive Analysis of Ocean Parameters, 683
- Online Exploration Path Planning for a Ground Robot Using the Structure of the Environment, 546
- Parametric Studies of a Low-Frequency Underwater Transducer, 498
- Partitioned Cache Aware Dynamic Scheduling for Real-Time Applications on Multicore Processors, 263
- Performance Analysis of ANN-Based Improved Modulation Classification for GFDM System, 581
- Performance Evaluation of Composite Pressure Vessel Due to Delamination, 472
- Performance Evaluation of Standalone NavIC for the Indian Missile Program, 637
- Performance Parameter Estimation of Hybrid Rocket with Varying Concentration of Hydrogen Peroxide, 721
- Pixel Ablation-CAM: A New Paradigm in CNN Interpretability for Feature Map Visual Explanations, 188
- Predicting Vessel Speed Using Ensemble MLR and RF Models on AIS Data, 250
- Predictive Factor Analysis of Air-to-Air Engagement Outcomes Using Air Combat Manoeuvring Instrumentation Data, 35
- Predictive Modeling and Sensitivity Analysis for Averting Nanoparticle Agglomeration in Metal Matrices, 451
- PSO-Based Resource Allocation in Cognitive Radio Ad-Hoc Network, 331
- Qualification and Certification of Nickel based C1023 Super Alloys for Aero-Engine Applications, 444
- Relation Between Deep Chlorophyll Maximum and Vertical Thermal Structure in the Andaman Sea, 664
- Safety Monitoring of Storage and Use of Solid Homogeneous Rocket Propellants Through the Chemical Composition Analysis, 401
- Simulation of an Autonomous Radiation Detection Robot in Gazebo and Webots using SLAM and A-Star Algorithm, 749
- Study and Modelling of Effect of Tilt Angle on Thermal Signatures of Different Emissivity Surfaces, 362
- Study of Multi-state Phase Gradient Surface with Single Beam Anomalous Reflection for PassiveRIS Applications, 278
- Study on the Energetic Characteristics of Gas Generating Compositions Based on Guanidinium Azotetrazolate, 777
- Sub-Mesoscale Eddy Detection from Sentinel-1A SAR Image: A Case Study Along Vizag Coast, 670
- Tactical UAV Flight Performance Estimation and Validation,
- Taking Control of Dead Zone of Radiolocation Station by the Automatic Acting Electro-Optic System, 84
- The Degradation in Load Carrying Capability of Delaminated Specimens, 120

Variability of Hydrographic Properties in the Alleppey Terrace Region: Insights from July 2023 Observations, 709 Vessel Trajectory Route Spoofed Points Detection Using AIS Data: A Bi-LSTM Approach, 243

AUTHOR INDEX

A.R., Anantha Krishnan, 709 A.V., Ramesh Kumar, 504 Abdullha, Md. Mustafa, 325 Abidi, Ali Imam, 418

Addanki, Sangita Rao Achary, 463

Adithya, V., 749 Agarwal, Pankaj, 362 Ahamad, Nafees, 603 Ahirwar, Sukhdas, 371 Ali, Maifuz, 293 Ambat, Sooraj K., 236 Amos, Tummenye, 418

Anbalagan, Sasithradevi, 749

Anand, S., 570

Antonić, Vuk, 19 Arora, Devashish, 285 Arya, Nishan, 273 Arya, Ravi Kumar, 293 Awasthi, Saurabh, 603

B., Deepa, 236 Babu, P. Ramesh, 615 Babu, V. Suresh, 120, 472 Babu, Veeresh, A., 523

Baggam, Revathi Lavanya, 539

Bain, Akash, 691
Bal, Subhradip, 325
Banerjee, Subham, 588
Basita, Alok, 273
Baskar, Chanthini, 749
Bedi, Punam, 179
Bhan, R.K., 756
Bhatt, Pooja, 90
Bhowmick, S., 483
Bhuvaneswari, C.M., 444
Bisht, Kamlesh Singh, 603
Bisht, Sanjay, 179

Bisnt, Sanjay, 179 Biswas, Rajarshi, 691 Borkowski, Jacek, 401 Bose, Anindya, 637 Bui, Viet Quy, 740

Buragohain, Manoj Kumar, 120, 472

Chakrabarti, Mandar, 433 Chakravarthy, Mada, 371 Chand, Elisha, 273 Chandra, M. Sarath, 732 Chandrashekhar, 345 Charulatha, S., 732 Chatterjee, Ayan, 433 Chattopadhyay, Abir, 433 Chaubey, V.K., 345 Chaudhuri, Debasis, 188 Chaujar, Rishu, 756 Cheriyan, Anu Susan, 714 Cheriyan, Eldhose, 664 Choi, Daeyoung, 35 Choudhary, Dilip Kumar, 318 Choudhary, Khilawan, 769 Christie, Latha, 769

Dabrowski, Przemyslaw, 199 Dan, Sukabya, 637 Das, Deepanwita, 411 Datta, S.K., 769 Dayal, Pushpam, 120, 472 Demir, Hakan, 149 Dhiman, Nitin Kumar, 546 Divakar, B.P., 531 Dmowska-Jasek, Paulina, 159 Doongarwal, Seema, 300 Dovatov, Biljana, 19 Dwivedi, Pankaj Prasad, 556

E.M., Yadhunath, 677, 709

Fejdyś, Marzena, 159 Fernandez, Dominic Ricky, 702, 714

G., Jayaraman, 318
Gaba, Vivek, 483
Ganesan, Sivasankar, 570
Gangopadhyaya, Malay, 433
Ganwani, Priyanshu, 293
Ghatak, Rowdra, 637
Ghosh, Santanu, 3
Gloger, Maciej, 159
Góreczna-Skrzyńska, Emilia, 159
Goswami, Mrinal, 637
Goyal, Divyanshi, 250
Gupta, Sanjay, 451
Gurrala, Kiran Kumar, 581

Halder, Pulak, 111 Harikrishnan, 709 Harish, A.R., 278 Hashimov, Elshan G., 84 Hediyal, Nagaraj, 531 Himaja, Makkapati, 386 Huu, Hoang Trung, 777 Ivković, Dušan, 19 Ivković, Ratko, 426

J, Sam Suresh., 394 Jadhav, Jitendra J., 345 Jaiswal, Sourabh, 179 Jani, Akshat, 732 Jeevan, Jishnu, 683 Jha, Bal Mukund, 300 Jindal, Vinita, 179 Johannessen, Ola M., 696 John, Reji, 504 Joseph, Ajith, K., 696

K., Rajith, 677
K., Shajahan, 504
K.A., Anoop, 683
K.G., Preetha, 683
K.J., Akshay, 709
K.K, George Kurian, 691
K.S., Anjali, 702
Kale, Shirish Sharad, 444
Kalra, Aniket, 546
Kang, Dongsu, 27
Kar, Subrat, 379
Karvande, Rajesh Shankar, 111

Karvande, Rajesh Shankar, 11 Kasprzak, Piotr, 401 Kaya, Necmettin, 149 Khalaf, Thura Ali, 215 Khanduja, Vidhi, 167 Khemani, Deepak, 546 Kim, Yong-hwan, 35 Klich, Marek, 159

Klich, Marek, 159 Kowsalyadevi, A.K., 100 Krishnan, Anish B., 224 Kumar, Amit, 339 Kumar, Anumay, 512 Kumar, Ashok, 629 Kumar, Ashwani, 293 Kumar, Ashwin, 629

Kumar, Aylapogu Pramod, 581 Kumar, B. Praveen, 523 Kumar, Gande Arun, 64 Kumar, Neeresh, 300

Kumar, Prabhat, 129, 243, 250, 490

Kumar, R. Anil, 331 Kumar, Raj, 597 Kumar, Rajiv, 721 Kumar, Ravi, 3

Kumar, Satheesh, K., 702

Kumar, Suman Talapa Reddy, 645

Kumar, Umesh, 273 Kumar, Verandra, 273 Kumar, Vimal, 304, 312 Kumari, Vatsavayi Valli, 539

Kurylo, Jakub, 199

Lavanya, M., 52

Lee, Gyuejeong, 35 Lee, Sangjun, 27

M., Devendra, Meshram, 10 M., Harikrishnan, 714 M., Rajesh, 263 M.P., Subeesh, 677

M.R., Subash Chandrabose, 498

Madhav, M. Sai, 622 Madhavi, Tatineni, 111 Maharramov, Roman R., 84 Mahato, Somnath, 637

Maheswaran, P.A., 664, 670, 702, 709, 714

Mahto, Manpuran, 769 Mai, Huy Quang, 740 Mandal, Banashree, 411 Mandal, Niladri, 411 Mandal, Subha, 325 Manghnani, Pooja, 44 Mathur, Anshul, 273 Mazur, Izabela, 401 Mg, Phyo Mg, 339

Milenković-Babić, Miodrag, 19

Moghe, Asmita A., 44

Mohan, Akhilesh, 304, 312, 339

Mohan, K.M., 293 Mondal, Santanu, 588 Mosurović, Lazar, 426 Mounisha, Manuvarthi, 331 Mukherjee, Debadrita, 418 Murthy, Soppari Bhanu, 615

N, Biju, 498
Naidu, K. Dali, 546
Nambiar, Binoy, 691
Nandini, Jali, 206
Naresh, Praveen, 670
Nath, Kishore, N., 463
Nath, Nayani Kishore, 615
Navamani, Preethi Elizabeth, 76
Neti, Amitanshu Raj, 293
Nguyen, Dung Van, 740
Nguyen, Trung Viet, 740
Nowakowski, Marek, 199

Okramcha, Maxon, 293 Ostojić, Branislav, 19

P., Balakrishnan, 263 P., Murali Krishna, 236 P.A., Maheswaran, 683 Padenga, Tendai, 167 Pandhare, Rashmi, 90 Panić, Stefan, 426 Patri, Sreehari Rao, 206 Petrović, Mile, 426 Pillai, Ullas M., 696 Prabhu, T. Ram, 444 Prakash, P., 749 Prodanović, Radivoj, 426 Pullakandam, Muralidhar, 206 Purkait, Kabita, 433

R, Rajesh, 263 R.S., Arun Sundar, 504 Radhakrishnan, Sreeram, 657 Raj, Nitish, 129, 243, 250, 490 Raj, Roshin P., 696 Rajalakshmi, G., 691 Rajpoot, Vivek, 331 Rajput, Anant, 293 Raju, A., 523 Raju, G., 141 Ramarao, G., 141 Ramesh, MVL, 483 Rana, K.P.S., 451 Rana, Sylvie, 278 Rao, A. Raghunadha, 664, 714 Rao, Amara Prakasa, 371 Rathi, Vineet Kumar, 721 Rawat, Meenakshi, 285

S., Adithya, 677 S., Krishna Kumar, 444 S., Lekshmi, 670 S., Pushpa Mala, 10 S., Saritha, 683 Samanta, Akash, 188 Sang, Dam Quang, 777 Sanilkumar, K.V., 664 Sansanna, Maria, 670 Saravanan, S., 52 Sen, Gobinda, 325 Shankari, S., 64 Sharma, Aditya, 293 Sharma, Amit Kumar, 362 Sharma, Dilip Kumar, 556 Sharma, Manoj, 379

Ray, Arun Kumar, 588

Roy, Sumantra Dutta, 379

Roy, Manish, 622

Roy, Rajesh, 597

Sharma, Sanjay Kumar, 362 Sharma, Soumya, 418 Shaveta, 756 Shekhar, Ch. N.P.V. Chandra, 64 Shrivastava, Narendra Kumar, 120, 472 Shukla, Saurabh, 90 Sikder, Amit, 304, 312, 339 Singh, Amrik, 512 Singh, Aniket Kumar, 188 Singh, Indrasen, 318 Singh, Praveen Kumar, 523 Singh, Ravindra, 362 Singh, V.K., 597 Singhn, Manish Pratap, 188 Sivadas, Akshara T., 657 Soundarya, G., 394 Spalević, Petar, 426 Sreenija, Yallanki Sai, 278 Sreevalli, I. Yamini, 645 Srivastava, Gunjan, 304, 312, 339 Srivastava, Lokesh, 463 Stecki, Mateusz, 159 Sujitha, D., 570 Sundar, Joseph K. Abraham, 52 Swaminathan, Anand, 76

Taneja, S.B., 179
Tevatia, Abhishek, 451
Thakur, Dineshsingh G., 224
Thanh, Mai Van, 777
Tiwari, Pushpit, 362
Trifković, Milenko, 19
Tripathi, Girish Chandra, 285
Tripathi, Vijay Shanker, 271
Tuan, Nguyen Duy, 777

Udayanand, K., 257 Umamaheswari, G., 100 Umamaheswarir, M.G., 352 Uthaman, C.P., 657

V., Suresh Babu, 463 Vamsi, V. Krishna, 331 Vasistha, Prashant, 273 Venkatasubbaiah, Yelliboyana, 523 Verma, Deokumar, 483 Vermay, Ramesh K., 331 Vignesh, P., 444 Vigneshwari, S., 570 Vijayalakshmi, K.M., 352

Warkade, Akshay, 300

Yetkin, Gölge Ögücü, 215 Yuvaraja, S., 386

Zahra, Sadaf, 418