INDEX TO DEFENCE SCIENCE JOURNAL, VOLUME 69, 2019

TITLE INDEX

- A Modulation Technique for Sensorless Control of Switched Reluctance Motor, 223
- A Novel Method to Develop High Fidelity Laser Sensor Simulation Model for Evaluation of Air to Ground Weapon Algorithms of Combat Aircraft, 3
- A Rapid Flow through Membrane Enzyme Linked Immunosorbent Assay for Bacillus anthracis using Surface Array Protein as a Biomarker, 348
- Accurate Tracking of Manoeuvring Target using Scale Estimation and Detection, 495
- An Analytical Approach to Design Camouflage Net for Microwave Absorption, 469
- An Intelligent Gain based Ant Colony Optimisation Method for Path Planning of Unmanned Ground Vehicles, 167
- An Intelligent Reconnaissance Framework for Homeland Security, 361
- Anti submarine Warfare Oceanography, 107
- Approximate Solution and its Convergence Analysis for Hypersingular Integral Equations, 173
- Assessing the Performance of Nano Lubricant on Zinc Aluminium Alloy, 396
- Ballistic Behaviour of Austempered Compacted Graphite Iron Perforated Plates, 571
- Ballistic Protection of Military Shelters from Mortar Fragmentation and Blast Effects using a Multi-layer Structure, 538
- Behavioural Fault tolerant control of an Omni directional Mobile Robot with Four mecanum Wheels, 353
- Blast Wave Characteristics and TNT Equivalent of Improvised Explosive Device at Small scaled Distances, 328
- Blind Identification of Block Interleaved Convolution Code Parameters, 274
- Cellular Automata with Synthetic Image A Secure Image Communication with Transform Domain, 259
- Chemical Protection Studies of Activated Carbon Spheres based Permeable Protective Clothing Against Sulfur Mustard, a Chemical Warfare Agent, 577
- Correlates of Professional Obsolescence among Researchers, 557
- Design and Selection Criteria of Main Parachute for Re-entry Space Payload, 531
- Determination of Nonlinear Refractive Index of Zinc Phthalocyanine by Pump Induced Fizeau Interferometry, 27
- Development of a Fuel Quantity based Engine Control Unit Software Architecture, 203
- Development of Neural Network Based Adaptive Change Detection Technique for Land Terrain Monitoring with Satellite and Drone Images, 474

Development of Optimal Thresholding Technique for Shape

and Size Detection for Through-the-wall Radar Imaging System, 564

- Device Free Localisation Techniques in Indoor Environments, 378
- Dimensions Selection Criteria of Stair shaped Slot for Obtaining the Wideband Response of CPDRA, 442
- DRDO and Expectations of Stakeholders, 613
- Effect of Azimuthal Asymmetry Caused by Upwelling on 3D Ocean Acoustic Propagation, 136
- Effect of Environment on Underwater Acoustic Communication Data Rates, 163
- Effect of Formaldehyde to Phenol Ratio in Phenolic Beads on Pore Structure, Adsorption and Mechanical Properties of Activated Carbon Spheres, 46
- Effect of Fuel Distribution on the Onset of Detonation in Gaseous Octane Air Mixture, 31
- Effect of Helical Winding Angle on External Pressure based Buckling of Partially Filled Thin Composite Cylindrical Shells, 313
- Effect of Type of Carbon Matrix on Tribological Properties of C/C Aircraft Brake Discs, 585
- Efficiency and Stiffness of the Single Lap Bolt Joints in Glass Epoxy Composites, 280
- Efficient Digital System Management using IEEE 1451.0 Enabled Control Architecture, 254
- Efficient Embedded Hardware Architecture for Stabilised Tracking Sighting System of Armoured Fighting Vehicles, 208
- Energy Conservation Method Combining Anti spray Rail and Wedge Flap for High speed Displacement Hulls, 409
- Ergonomic Assessment of Multi Calibre Individual Weapon System in Virtual Reality Platform, 240
- Failure Behaviours of Steel Projectiles with Localised Melting Against Armour Plates, 489
- Fast 3D Integrated Circuit Placement Methodology using Merging Technique, 217
- Fault Detection and Isolation in Electrical Machines using Deep Neural Networks, 249
- Formulation of an Empirical Relation between Chlorophyll and Sea Surface Temperature in the Southeastern Arabian Sea, 131
- Genetic Algorithm Optimisation of a TNT Solidification Model, 545
- Graceful Degradation An Airborne Surveillance Radar Perspective, 389
- Ground penetrating Radar Clutter Removal via 1D Fast Sub band Decomposition, 74
- Heavy Military Land Vehicle Mass Properties Estimation Using Hoisting and Pendulum Motion Method, 550

- Influence of Initial State Errors on Perturbation Guidance Accuracy, 10
- Intra annual Variability of the Arabian Sea high salinity water mass in the South Eastern Arabian Sea during 2016 17, 149
- Low Frequency Broad Band Acoustic Propagation in Andaman Sea, 127
- Methodology for Integrating Computational Tree Logic Model Checking in Unified Modelling Language Artefacts A Case Study of an Embedded Controller, 58
- Microwave Absorption Performance of Graphene Nanoplatelets Dispersed SiC, 437
- Mitigation of Blast Induced Acceleration using open cell natural rubber and Synthetic Foam, 53
- Mixed Layer Budget Terms on Acoustic Propagation A Study based on the Butterfly Track Experiment in the South Eastern Arabian Sea, 156
- Modelling of Multi Inductor based Balancing of Battery Pack for Electrical Mobility, 266
- Modified Low Rank Approximation for Detection of Weak Target by Noise space Exploitation in Through Wall Imaging, 464
- Multiphysics Analysis of a Magnetorheological Damper, 230
- Novel Dual band SIW Filter Using Quad mode Cavity, 453
- Numerical Analysis and Measurement of Electric field Strength inside GTEM Cell at GSM Frequencies, 423
- Numerical Simulation of the TNT Solidification Process, 336
- Observed Inter annual Variability of Upwelling Characteristics during 2016 2017 A Study using Princeton Ocean Model, 142
- On the Possible Mechanisms for Saltening of the Bay of Bengal, 93
- Onset and Evolution of Upwelling along the West Coast of India, 120
- Optimal Operating Depth Search for Active Towed Array Sonar using Simulated Annealing, 415
- Parametric Study of the Reltron Oscillators, 448
- Particle Swarm Optimisation of Hole Quality Characteristics in Laser Trepan Drilling of Inconel 718, 37
- Path Planning of Anti ship Missile based on Voronoi Diagram and Binary Tree Algorithm, 369
- Performance Analysis of One Model of Communication and Information System in Military Operation, 290
- Rapid Transfer Alignment of SINS with Measurement Packet Dropping based on a Novel Suboptimal Estimator, 320
- Real Time Non uniformity Correction Algorithm and Implementation in Reconfigurable Architecture for Infra red Imaging Systems, 179
- Recent Advancements in Study of Effects of Nano Micro Additives on Solid Propellants Combustion by Means of the Data Science Methods, 20

- Recent Trends in Computational Electromagnetics for Defence Applications, 65
- Reliability Analysis of Complex Systems with Failure Propagation, 481
- Reliable Integrated Satellite Terrestrial Communications using MIMO for Mitigation of Microwave Absorption by Earths Oxygen, 458
- Resonator to Laser Cavity Decoupling Interface for Chemical Oxygen Iodine Laser, 298
- Rheology of Fumed Silica and Polyethylene Glycol Shear Thickening Suspension with Nanoclay as an Additive, 402
- Selection of Core shell Material based Electromagnetic Wave Absorbers in 2 to18 GHz using TOPSIS and VIKOR Ranking Methods, 431
- Selection of Pressure Angle based on Dynamic Effects in Asymmetric Spur Gear with Fixed Normal Contact Ratio, 303
- Self managed Access Scheme for Demand Request in TDM TDMA Star Topology Network, 80
- Simulation of Fragmentation Characteristics of Projectile Jacket Made of Tungsten Alloy after Penetrating Metal Target Plate using SPH Method, 591
- Standoff Detection and Identification of Explosives and Hazardous Chemicals in Simulated Real Field Scenario using Time Gated Raman Spectroscopy, 342
- Substrate Integrated Waveguide fed Wideband Circularly Polarised Antenna with Parasitic Patches, 87
- Synthesis and Application of Nano structured Bi layer YSZ LZ Thermal Barrier Coating, 185
- Synthesis of Polycarbosilane, Polymer Impregnation Pyrolysisbased C/SiC Composites and Prototype Development, 599
- Template free Micro Doppler Signature Classification for Wheeled and Tracked Vehicles, 517
- Terrain Accessibility Prediction for a New Multi axle Armoured Wheeled Vehicle, 195
- THz Communication Technology in India Present and Future, 510
- Total Radiated Power Measurement in an Uncalibrated Reverberation Chamber, 427
- Towed Acoustic Countermeasures for Defending Acoustic Homing Torpedoes, 607
- Venous Thrombosis could be Gender Specific, Women Beware!, 503
- Vetronics Architecture with in vehicle Networking, 236
- Warmest Sea Surface Temperature Event in the South Eastern Arabian Sea over the Decade using Satellite and INS Sagardhwani Observations, 109
- Winter Thermohaline Features along 10 degree N in the Bay of Bengal, 115

AUTHOR INDEX

Abdo, G.M. see Elshenawy, T. Abrukov, Victor S. 20 Acharya, J. see Sharma, P.K. Acharyya, Amit, see Sabbavarapu, Srinivas Agarwal, Ankush, 474 Aggrawal, Sanjeevan, see Singh, Arjun Agrawal, A.K. see Pratap, Mahendra Agrawal, Anurag Vijay, 458 Albert, P. Issac, see Anand, P. Alegaonkar, Prashant S. see Sandhu, Inderpal Singh An, Sangkyum, 415 Anand, P. 142 Anand, P. see Raju, R.P. Anand, V. see Sundararaman, R. Ansari, Zahir Ahmed, 495 Anu, A.P. 109 Anufrieva, Darya A. see Abrukov, Victor S. Anusha, K.S. 378 Arif, Syafiq M.S. see Suhaimi, Khalis

Balaji, Suganth, *see* Fernandez, Dominic Ricky Balasubramanian, P. *see* Sabbavarapu, Srinivas Balos, S. 571 Bandyopadhyay, Aparajita, *see* Rahaman, M. H. Bassi, Sunil, 31 Bharath, Rajaghatta Sundararam, *see* Abrukov, Victor S. Bhattacharyya, Debojyoti, *see* Chatterjee, Tirthankar Bhushan, Gopal, 613 Biswas, Ipsita, *see* Singh, Mansi Biyalkar, Mandar K. 464

Caldeira, Aldelio Bueno, see Catureba, Rafaela Pedroso see Susantez, Çiğdem Castedo, Ricardo, see Chiquito, Maria Catureba, Rafaela Pedroso, 336 Chandrasekaran, Nichith, see Abrukov, Victor S. Chatterjee, Tirthankar, 240 Chaturvedi, A. see Sharma, P.K. Chaturvedi, Shashank, see Bassi, Sunil Che, Changchang, 481 Chen, Hu, see Shen, Zhengxiang Chen, Xi, see Cheng, Chun Cheng, Chun, 591 Cheng, Dingyue, see Shen, Zhengxiang Cheriyan, Eldhose, 131 Chiquito, Maria, 328 Christopher, Sargunaraj, see Rahaman, M. H.

Dai, Hongde, 320 Dash, A.P. 313 Devetak, Sasa M. 290 Dhaker, Kedari Lal, 37 Dohare, Rajeev Kr. *see* Varshney, A.K. Dong, Shouquan, *see* Shi, Yan Dramicanin, M. *see* Balos, S. Du, Chengxin, *see* Cheng, Chun Du, Zhonghua, *see* Cheng, Chun Dubey, Satya K. *see* Gururani, Deepshikha *see* Narang, Naina Dwivedi, Smrity, *see* Singh, Akhilendra Pratap

Elshenawy, T. 538 Erer, Isin, *see* Kumar, Suresh Eric-Cekic, O. *see* Balos, S.

Fernandez, Dominic Ricky, 115, 120 see Raju, R.P.

Gambhir, Tanvi, see Gulati, Kamal Kumar Gambhir, Vijayeta, see Gulati, Kamal Kumar Ganesan, K. see Sharma, P.K. Ganju, Lilly, see Srivastava, Swati Gao, Changsheng, see Jing, Wuxing Garg, Iti, see Srivastava, Swati George, Jomon, 607 Ghosh, Debashis, see Verma, Kamlesh Goel, A. K. see Puranik, Nidhi Gotra, Shailza, see Varshney, Gaurav Govindaswamy, D. see Srinivasan, S. Guanghu, Jin, 517 Guedes, Rodrigo Otávio de Castro, see Catureba, Rafaela Pedroso Gulati, Kamal Kumar, 342 Gulia, Sanjay, see Gulati, Kamal Kumar Gupta, A.K. see Kumar, Anil see Sharma, P.K. Gururani, Deepshikha, 427

Han, Jilong, *see* Cheng, Chun Harikrishnan, M. *see* Anu, A.P. He, Feng, *see* Guanghu, Jin

Jagirdar, V. V. 195 Jaibalaganesh, T. *see* Kamala, J. Jain, Anmol, *see* Pelluri, Sambaiah Jain, P.K. 448 Jain, Pradip Kumar, *see* Singh, Akhilendra Pratap Jancirani, J. *see* Nanthakumar, A.J.D. Janjatovic, P. *see* Balos, S. Jayakumar, M. *see* Anusha, K.S. Jensen, Samuel J. 203 Jing, Wuxing, 10 Joseph, Lijo, 409

Kamala, J. 254 Kaplan, Nur Hüseyin, see Kumlu, Deniz Karasakal, Gökhan, see Kumlu, Deniz Karovic, Samed M. see Devetak, Sasa M. Kartikeyan, M.V. see Pelluri, Sambaiah Kaushik, Brajesh Kumar, see Khare, Sudhir Khare, Sudhir, 179 Kochaleema, K.H. 58 Kumar, Abhishek, see Maurya, Anil Kumar Kumar, Abhishek, see Singh, Samarjit Kumar, Anil, 27 Kumar, Arvind, see Saravanakumar, Murugeshwari Kumar, Avnish, see Ansari, Zahir Ahmed see Verma, Kamlesh Kumar, Bambam, see Bivalkar, Mandar K. Kumar, Bhuvnesh, see Srivastava, Swati Kumar, K. Ajith, see George, Jomon Kumar, K. Senthil, see Kumar, Suresh Kumar, Manoj, see Puranik, Nidhi Kumar, Nitesh, see Gulati, Kamal Kumar Kumar, P.V. Hareesh, see Prasad, C. Anoopa Kumar, Rajender, see Singh, Ajay Kumar Kumar, S.P. Suresh see Thomas, Benny Kumar, S. Sateesh, see Maheswaran, P.A. Kumar, S. Satheesh, see Maheswaran, PA. Kumar, Sandeep, see Agarwal, Ankush Kumar, Suresh, 3, 599 Kumar, Swadesh, see Pratap, Mahendra Kumar, T. Pradeep, see Fernandez, Dominic Ricky see Maheswaran, P.A. Kumar, Tarun, 361 Kumarasamy, A. see Jensen, Samuel J. Kumlu, Deniz, 74 Kushwaha, Dharmender Singh, see Kumar, Tarun

Lal, Darshan, *see* Singh, Arjun Lee, Keunhwa, *see* An, Sangkyum Li, Juan, *see* Dai, Hongde Lopez, Lina M. *see* Chiquito, Maria Lukin, Alexander N. *see* Abrukov, Victor S.

Madhusudan, M. see Bhushan, Gopal Maheswaran, P.A. 149, 156 see Cheriyan, Eldhose Mahto, Manpuran, see Jain, P. K. Mainuddin, see Varshney, A.K. Majumdar, Deepti, see Chatterjee, Tirthankar Mallick, B. see Satpathy, Radhakanta Mancilla, Juan M. see Chiquito, Maria Manikandan, S. see Srinivasan, S. Manocha, L.M. see Kumar, Suresh Marathe, Rajeev, see Verma, Kamlesh Maurya, Anil Kumar, 437 Mehta, Rajeev, see Singh, Mansi Mishra, B.K. see Satpathy, Radhakanta Mishra, B.R. see Satpathy, Radhakanta Mishra, Raghwesh, see Kumar, Suresh Mishra, Swati, 353 Mohan, Devendra, see Kumar, Anil Mohan, Santhakumar, see Mishra, Swati Mohd, Hafizi N. see Suhaimi, Khalis Mugali, Shrinivas V. see Raijada, Nimesh S. Murugaveni, S. Parimala, 396

N. X. Elizabeth Shani, *see* Nair, Nimmi R. *see* Suganthbalaji, R. Nair, Nimmi R. 127 *see* Suganthbalaji, R. Nair, P. V. *see* Nair, Nimmi R.

see Suganthbalaji, R. Nanthakumar, A.J.D. 230 Narang, Naina, 423 Ni, Xiaomei, see Che, Changchang Nigam, Madhav Ji, see Ansari, Zahir Ahmed Niji, T. Y. see Fernandez, Dominic Ricky Ojha, V.N. see Gururani, Deepshikha see Narang, Naina Oommen, Charlie, see Abrukov, Victor S. Pal, Madhusudan, see Chatterjee, Tirthankar Pal, Surendra, see Rahaman, M. H. Pal, V. see Puranik, Nidhi Pandey, Arun Kumar, see Dhaker, Kedari Lal Pandey, V. S. see Varshney, Gaurav Paul, Pramod M. see Jensen, Samuel J. Pavlovic, Boban Z. see Devetak, Sasa M. Pelluri, Sambaiah, 453 Prasad, C. Anoopa, 93 Prasad, M.S.R. see Dash, A.P. Prasad, N. Eswara, see Kumar, Suresh Prasad, N.N.S.S.R.K. see Kumar, Suresh Prasad, N.S. see Jensen, Samuel J. Pratap, Mahendra, 531 Puranik, Nidhi, 348

Radisavljevic, I. see Balos, S. Raghawan, Singaravelu, see Saravanakumar, Murugeshwari Rahaman, M. H. 510 Raijada, Nimesh S. 236 Rajasekaran, S. C. see Nanthakumar, A.J.D. Rajnovic, D. see Balos, S. Raiu, R.P. 136 Rakesh N, Naga Venkata, see Joseph, Lijo Ramachandra, S. see Thomas, Benny Ramachandran, Rajesh, 389 Ramanathan, Ramachandran, see Anusha, K.S. Ramesh, A. see Jensen, Samuel J. Ranjan, Ashok, see Kumar, Suresh Rao, A. Raghunadha, see Anand, P. see Cheriyan, Eldhose see Fernandez, Dominic Ricky see Raju, R.P. Rao, J. Gururaja, 585

Ravichandran, K. S. *see* Viswanathan, Sangeetha Ravichandran, K. *see* Srinivasan, S. Rawat, Harish S. *see* Gururani, Deepshikha Rawat, Meenakshi, *see* Agrawal, Anurag Vijay Ray, Kamala Prasan, *see* Rahaman, M. H. Reddy, C. Ramesh, *see* Sabbavarapu, Srinivas Reedy, Martha Narsi, *see* Gulati, Kamal Kumar Reginald, Rajaseeli, *see* Vardhan, Rigvendra Kumar Risby, M.S. *see* Suhaimi, Khalis

Sabbavarapu, Srinivas, 217 Sai, M. 249 Saini, J. S. *see* Singh, Jaspreet Saini, Trilok Kumar, 80 Sanalkumar, V. R. see Abrukov, Victor S. Sandhu, Inderpal Singh, 53 Sanilkumar, K. V. see Cheriyan, Eldhose see Fernandez, Dominic Ricky see Shenoy, S. Kedarnath Sankaran, Krishnaswamy, 65 Sankaranarayansamy, K. see Thomas, Benny Santhanakrishnan, T. see George, Jomon Santhoshkumar, G. see Kochaleema, K.H. Santos, Anastasio P. see Chiquito, Maria Sarathkumar, K. see Nanthakumar, A.J.D. Saravanakumar, Murugeshwari, 87 Saroha, D.R. see Sandhu, Inderpal Singh Sathe, M. see Sharma, P.K. Satpathy, Radhakanta, 185 Saurabh, see Maurya, Anil Kumar Savithri, S. see Sundararaman, R. Selvam, P. see Rao, J. Gururaja Selvathai, T. see Vardhan, Rigvendra Kumar Seong, Woojae, see An, Sangkyum Seoud, Mohamed Aboel, see Elshenawy, T. Setia, Amit, see Sharma, Vaishali Shani, N. X. Elizabeth, see Anu, A.P. Sharma, Mukesh, see Mishra, Swati Sharma, P.K. 577 Sharma, Reena, see Ramachandran, Rajesh Sharma, S.C. see Saini, Trilok Kumar Sharma, S.P. see Sharma, P.K. Sharma, Vaishali, 173 Shekhar, Sellammal, see Viswanathan, Sangeetha Shen, Zhengxiang, 489 Shenoy, S. Kedarnath, 107 Shi, Yan, 369 Sidjanin, L. see Balos, S. Sinchu, P. see George, Jomon Singh, Ajay Kumar, 557 Singh, Akhilendra Pratap, 564 Singh, Arjun, 46 Singh, Dharmendra, see Agarwal, Ankush see Bivalkar, Mandar K. see Singh, Jaydeep Singh, Jaspreet, 280 Singh, Jaydeep, 469 Singh, Kulwinder, see Singh, Jaspreet Singh, M.P. see Kumar, Anil Singh, Mansi, 402 Singh, Manvendra, see Khare, Sudhir Singh, Rakesh, see Varshney, Gaurav Singh, Samarjit, 431 see Maurya, Anil Kumar Singh, V.V. see Sharma, P.K. Singhal, Gaurav, see Varshney, A.K. Sinnur, K.H. see Rao, J. Gururaja Sivakumar, P. see Vardhan, Rigvendra Kumar Sivaraman, R. see Sundararaman, R. Slavkovic, Rade V. see Devetak, Sasa M. Soni, Sanjay Kumar, see Bassi, Sunil Sridevi, A. see Sundararaman, R.

Srinivasan, Babji, see Sai, M. Srinivasan, S. 223 Srinivasan, T. see Sundararaman, R. Srivastava, Swati, 503 Subramanian, V Anantha, see Joseph, Lijo Suganthbalaji, R. 163 Suganthbalaji, R. see Nair, Nimmi R. Suhaimi, Khalis, 550 Sundararaman, R. 259 Susa, Vladimir B. see Devetak, Sasa M. Susantez, Çiğdem, 545

Tamakuwala, Jimmy B. 274 Tan, K.S. *see* Suhaimi, Khalis Tang, Liang, *see* Dai, Hongde Tapas, Anand M. *see* Viswanathan, Sangeetha Thakare, V.B. *see* Sharma, P.K. Thangadurai, Murugan, *see* Sandhu, Inderpal Singh Thomas, Anand Mammen, *see* Jensen, Samuel J. Thomas, Benny, 303 Thyla, P R, *see* Murugaveni, S. Parimala Tomar, L.N.S. *see* Sharma, P.K. Trikande, M. W. *see* Jagirdar, V. V. Tripathi, N. *see* Puranik, Nidhi Tripathi, N.K. *see* Sharma, P.K.

Umamaheswari, B. *see* Kamala, J. Unny, V.K. *see* Maheswaran, P.A. Upadhyay, H. N. *see* Sundararaman, R. Upadhyay, Parth, *see* Sai, M. Uthaman, C.P. *see* Maheswaran, P.A.

Vardhan, Rigvendra Kumar, 266 Varshney, A.K. 298 Varshney, Gaurav, 442 Varughese, Suma, *see* Ramachandran, Rajesh Velmurugan, R. *see* Dash, A.P. Verma, Kamlesh, 208 Verma, Sanjeev K, *see* Singh, Mansi Verma, V. *see* Sharma, P.K. Viswanathan, Sangeetha, 167

Wang, Du, *see* Shen, Zhengxiang Wang, Huawei, *see* Che, Changchang Wang, Xibin, *see* Dai, Hongde

Xu, Lizhi, see Cheng, Chun

Yadav, S.S. *see* Sharma, P.K. Yaduvanshi, R.S. *see* Varshney, Gaurav Yenes, Jose I. *see* Chiquito, Maria Yuan, Shuqiang, *see* Shen, Zhengxiang

Zhang, Lihua, see Shi, Yan Zhang, Yongsheng, see Guanghu, Jin Zhen, Dong, see Guanghu, Jin Zheng, Xu, see Jing, Wuxing Zhu, Guorong, see Shen, Zhengxiang