## Mamoun F Abdel-Hafez

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6707211/publications.pdf

Version: 2024-02-01

59 papers

1,158 citations

331670 21 h-index 32 g-index

61 all docs

61 docs citations

61 times ranked

994 citing authors

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Observability of an integrated GPS/INS during maneuvers. IEEE Transactions on Aerospace and Electronic Systems, 2004, 40, 526-535.   | 4.7 | 115       |
| 2  | Improved Battery SOC Estimation Accuracy Using a Modified UKF With an Adaptive Cell Model Under Real EV Operating Conditions. IEEE Transactions on Transportation Electrification, 2018, 4, 408-417.                                   | 7.8 | 104       |
| 3  | An Instrumentation System Applied to Formation Flight. IEEE Transactions on Control Systems Technology, 2007, 15, 75-85.   | 5.2 | 62        |
| 4  | Enhanced, Delay Dependent, Intelligent Fusion for INS/GPS Navigation System. IEEE Sensors Journal, 2014, 14, 1545-1554.  | 4.7 | 61        |
| 5  | The Autocovariance Least-Squares Technique for GPS Measurement Noise Estimation. IEEE<br>Transactions on Vehicular Technology, 2010, 59, 574-588.  | 6.3 | 53        |
| 6  | An In-Pipe Leak Detection Robot With a Neural-Network-Based Leak Verification System. IEEE Sensors Journal, 2019, 19, 1153-1165.   | 4.7 | 50        |
| 7  | A Novel Bias Detection Technique for Partial Discharge Localization in Oil Insulation System. IEEE<br>Transactions on Instrumentation and Measurement, 2016, 65, 448-457.  | 4.7 | 49        |
| 8  | Non-Linear Autoregressive Delay-Dependent INS/GPS Navigation System Using Neural Networks. IEEE Sensors Journal, 2017, 17, 1105-1115.  | 4.7 | 40        |
| 9  | Enhancement in Li-Ion Battery Cell State-of-Charge Estimation Under Uncertain Model Statistics. IEEE<br>Transactions on Vehicular Technology, 2016, 65, 4608-4618.   | 6.3 | 37        |
| 10 | Toward High-Accuracy Estimation of Partial Discharge Location. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 2145-2153.  | 4.7 | 34        |
| 11 | Optimization of Intelligent Approach for Low-Cost INS/GPS Navigation System. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 73, 325-348.   | 3.4 | 33        |
| 12 | Estimating Vehicle State by GPS/IMU Fusion with Vehicle Dynamics. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 74, 147-172.  | 3.4 | 30        |
| 13 | Pipeline Inspection Gauge Position Estimation Using Inertial Measurement Unit, Odometer, and a Set of Reference Stations. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2016, 2, . | 1.1 | 27        |
| 14 | Inertial Navigation System of Pipeline Inspection Gauge. IEEE Transactions on Control Systems Technology, 2020, 28, 609-616.   | 5.2 | 26        |
| 15 | On the development of an inertial navigation error-budget system. Journal of the Franklin Institute, 2011, 348, 24-44.   | 3.4 | 24        |
| 16 | Constrained low-cost GPS/INS filter with encoder bias estimation for ground vehicles׳ applications. Mechanical Systems and Signal Processing, 2015, 58-59, 285-297.  | 8.0 | 24        |
| 17 | Low-Cost Reduced Navigation System for Mobile Robot in Indoor/Outdoor Environments. IEEE Access, 2020, 8, 25014-25026.   | 4.2 | 24        |
| 18 | Real-Time Implementation of GPS Aided Low-Cost Strapdown Inertial Navigation System. Journal of Intelligent and Robotic Systems: Theory and Applications, 2011, 61, 527-544.   | 3.4 | 22        |

| #  | Article  | IF  | Citations |
|----|--|-----|-----------|
| 19 | Performance enhancement of low-cost, high-accuracy, state estimation for vehicle collision prevention system using ANFIS. Mechanical Systems and Signal Processing, 2013, 41, 239-253.   | 8.0 | 22        |
| 20 | Detection of Bias in GPS Satellites' Measurements: A Probability Ratio Test Formulation. IEEE Transactions on Control Systems Technology, 2014, 22, 1166-1173.                           | 5.2 | 22        |
| 21 | Multiple sensor fusion for mobile robot localization and navigation using the Extended Kalman Filter. , $2015, $ , .   |     | 22        |
| 22 | Building a robust integrity monitoring algorithm for a low cost GPS-aided-INS system. International Journal of Control, Automation and Systems, 2010, 8, 1108-1122.                      | 2.7 | 21        |
| 23 | Mitigating the Effect of Noise Uncertainty on the Online State-of-Charge Estimation of Li-lon Battery<br>Cells. IEEE Transactions on Vehicular Technology, 2019, 68, 8593-8600.          | 6.3 | 21        |
| 24 | The smooth variable structure filter: A comprehensive review. , 2021, 110, 102912.   |     | 21        |
| 25 | A Hybrid Estimation-Based Technique for Partial Discharge Localization. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 8744-8753.                                       | 4.7 | 17        |
| 26 | Attitude and Flapping Angles Estimation for a Small-Scale Flybarless Helicopter Using a Kalman Filter. IEEE Sensors Journal, 2015, 15, 2114-2122.  | 4.7 | 16        |
| 27 | Predicting the Release of Chemotherapeutics From the Core of Polymeric Micelles Using Ultrasound. IEEE Transactions on Nanobioscience, 2015, 14, 378-384.                                | 3.3 | 15        |
| 28 | A Cascaded Approach for Quadrotor's Attitude Estimation. Procedia Technology, 2014, 15, 268-277.   | 1.1 | 14        |
| 29 | Alleviating Dynamic Model Uncertainty Effects for Improved Battery SOC Estimation of EVs in Highly Dynamic Environments. IEEE Transactions on Vehicular Technology, 2021, 70, 6554-6566. | 6.3 | 14        |
| 30 | Accurate Estimation of Partial Discharge Location using Maximum Likelihood. , 2018, 2, 1-4.  |     | 11        |
| 31 | A comparison of adaptive trajectory tracking controllers for wheeled mobile robots. , 2015, , .  |     | 10        |
| 32 | An Adaptive Autotuned Polynomial-Based Extended Kalman Filter for Sensorless Surface Temperature Estimation of Li-Ion Battery Cells. IEEE Access, 2022, 10, 14038-14048.                 | 4.2 | 10        |
| 33 | On the GPS/IMU sensors' noise estimation for enhanced navigation integrity. Mathematics and Computers in Simulation, 2012, 86, 101-117.  | 4.4 | 9         |
| 34 | Intelligent fault detection and fusion for INS/GPS navigation system. , 2013, , .  |     | 7         |
| 35 | Identification of the Uncertainty Structure to Estimate the Acoustic Release of Chemotherapeutics From Polymeric Micelles. IEEE Transactions on Nanobioscience, 2017, 16, 609-617.       | 3.3 | 7         |
| 36 | Multi-Model Investigation and Adaptive Estimation of the Acoustic Release of a Model Drug From Liposomes. IEEE Transactions on Nanobioscience, 2020, 19, 68-77.                          | 3.3 | 7         |

| #  | Article   | IF  | Citations |
|----|---|-----|-----------|
| 37 | Optimization of intelligent-based approach for low-cost INS/GPS navigation system. , 2013, , .  |     | 6         |
| 38 | Estimating vehicle state by GPS/IMU fusion with vehicle dynamics. , 2013, , .   |     | 6         |
| 39 | Auto Takeoff and Precision Terminal-Phase Landing Using an Experimental Optical Flow Model for<br>Global Positioning System/Inertial Navigation System Enhancement. ASCE-ASME Journal of Risk and<br>Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2019, 5, . | 1.1 | 6         |
| 40 | GPS Measurement Noise Estimation in Non-Ideal Environments. Navigation, Journal of the Institute of Navigation, 2008, 55, 55-66.  | 2.8 | 5         |
| 41 | ROS validation for non-holonomic differential robot modeling and control: Case study: Kobuki robot trajectory tracking controller. , 2017, , .  |     | 5         |
| 42 | Modeling and Bias-Robust Estimation of the Acoustic Release of Chemotherapeutics from Liposomes. Journal of Biomedical Nanotechnology, 2019, 15, 162-169.   | 1.1 | 5         |
| 43 | Low-cost, high-accuracy, state estimation for vehicle collision prevention system. , 2012, , .  |     | 4         |
| 44 | State Estimation for a Small Scale Flybar-less Helicopter. Procedia Technology, 2014, 15, 258-267.  | 1.1 | 4         |
| 45 | Hybrid Low-Cost Approach for Quadrotor Attitude Estimation. Journal of Computational and Nonlinear Dynamics, 2015, 10, .  | 1.2 | 4         |
| 46 | Computationally Efficient State-of-Charge Estimation in Li-Ion Batteries Using Enhanced Dual-Kalman Filter. Energies, 2022, 15, 3717.   | 3.1 | 4         |
| 47 | A High-Integrity and Efficient GPS Integer Ambiguity Resolution Method. Navigation, Journal of the Institute of Navigation, 2003, 50, 295-310.  | 2.8 | 3         |
| 48 | Measuring the Acoustic Release of a Chemotherapeutic Agent from Folate-Targeted Polymeric Micelles. Journal of Nanoscience and Nanotechnology, 2018, 18, 5511-5519.   | 0.9 | 3         |
| 49 | Intelligent attitude and flapping angles estimation of flybarless helicopters under near-hover conditions. Journal of the Franklin Institute, 2018, 355, 6830-6858.   | 3.4 | 3         |
| 50 | Caged Quadrotor Drone for Inspection of Central HVAC Ducts. , 2019, , .   |     | 3         |
| 51 | The Multiple-Hypothesis Wald Sequential Probability Ratio Test for GPS Integer Ambiguity Resolution.<br>Navigation, Journal of the Institute of Navigation, 2004, 51, 231-247.  | 2.8 | 2         |
| 52 | A sequential approach for fault detection and identification of vehicles' ultrasonic parking sensors. , 2011, , .   |     | 2         |
| 53 | Real-Time Implementation of GPS Aided Low-Cost Strapdown Inertial Navigation System., 2010, , 527-544.  |     | 2         |
| 54 | The Autocovariance Least Squares Technique for GPS Interference/Jamming Detection. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8990-8995.  | 0.4 | 1         |

| #  | Article  | IF  | Citations |
|----|--|-----|-----------|
| 55 | Enhanced EKF Method for State-of-Charge Estimation of Electric Vehicles' Li-ion Batteries under Highly Dynamic Power Profiles. , 2021, , .   |     | 1         |
| 56 | A Multiple Hypothesis Wald Sequential Probability Ratio Test for Integer Ambiguity Resolution. , 2003, , .   |     | 0         |
| 57 | Integrity monitoring of lowcost GPS-aided-INS systems. , 2008, , .   |     | O         |
| 58 | A Multihypothesis Sequential Probability Test for Fault Detection and Identification of Vehicles' Ultrasonic Parking Sensors. International Journal of Navigation and Observation, 2011, 2011, 1-11. | 0.8 | 0         |
| 59 | A multi-hypothesis sequential probability test for partial discharges localization in power transformers. , 2015, , .  |     | 0         |