# Michael Suppa

List of Publications by Year
in descending order

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|---|---|---|---|
| 36<br>papers | 1,402<br>citations | 1478505<br>6<br>h-index | 1588992<br>8<br>g-index |
| 36<br>all docs | 36<br>docs citations | 36<br>times ranked | 1496<br>citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------| 
| 1 | Toward a Fully Autonomous UAV: Research Platform for Indoor and Outdoor Urban Search and Rescue. IEEE Robotics and Automation Magazine, 2012, 19, 46-56. | 2.0 | 627 |
| 2 | Efficient next-best-scan planning for autonomous 3D surface reconstruction of unknown objects. Journal of Real-Time Image Processing, 2015, 10, 611-631. | 3.5 | 112 |
| 3 | Stereo vision based indoor/outdoor navigation for flying robots. , 2013, , . | | 105 |
| 4 | View Planning for Multi-View Stereo 3D Reconstruction Using an Autonomous Multicopter. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 65, 309-323. | 3.4 | 50 |
| 5 | Optimization based IMU camera calibration. , 2011, , . | | 47 |
| 6 | Towards Autonomous Planetary Exploration. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 93, 461-494. | 3.4 | 44 |
| 7 | Depth-based tracking with physical constraints for robot manipulation. , 2015, , . | | 43 |
| 8 | Spatio-temporal initialization for IMU to camera registration. , 2011, , . | | 38 |
| 9 | Next-best-scan planning for autonomous 3D modeling. , 2012, , . | | 37 |
| 10 | Stereo-vision based obstacle mapping for indoor/outdoor SLAM. , 2014, , . | | 33 |
| 11 | Force and trajectory control of industrial robots in stiff contact. , 2013, , . | | 32 |
| 12 | Multi-robot 6D graph SLAM connecting decoupled local reference filters. , 2015, , . | | 31 |
| 13 | Combining object modeling and recognition for active scene exploration. , 2013, , . | | 30 |
| 14 | State estimation for highly dynamic flying systems using key frame odometry with varying time delays. , 2012, , . | | 24 |
| 15 | The 3D-Modeller: A Multi-Purpose Vision Platform. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , . | 0.0 | 22 |
| 16 | Landmark-Tree map: A biologically inspired topological map for long-distance robot navigation. , 2012, , . | | 13 |
| 17 | The LRU Rover for Autonomous Planetary Exploration and Its Success in the SpaceBotCamp Challenge. , 2016, , . | | 13 |
| 18 | Efficient camera-based pose estimation for real-time applications. , 2009, , . | | 12 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 19 | A biologically inspired navigation concept based on the Landmark-Tree map for efficient long-distance robot navigation. Advanced Robotics, 2014, 28, 289-302. | 1.8 | 12 |
| 20 | Autonomous pick and place operations in industrial production. , 2015, , . | | 12 |
| 21 | Shadow-based matching for precise and robust absolute self-localization during lunar landings. , 2015, , . | | 11 |
| 22 | Predictive path-accurate scaling of a sensor-based defined trajectory. , 2014, , . | | 9 |
| 23 | Revised force control using a compliant sensor with a position controlled robot. , 2012, , . | | 7 |
| 24 | Trajectory generation for immediate path-accurate jerk-limited stopping of industrial robots. , 2015, , . | | 6 |
| 25 | Towards efficient and scalable visual homing. International Journal of Robotics Research, 2018, 37, 225-248. | 8.5 | 6 |
| 26 | Real-time Image-based Localization for Hand-held 3D-modeling. KI - Kunstliche Intelligenz, 2010, 24, 207-214. | 3.2 | 5 |
| 27 | Feature based particle filter registration of 3D surface models and its application in robotics. , 2013, , . | | 5 |
| 28 | Efficient navigation based on the Landmark-Tree map and the $Z_\infty$ algorithm using an omnidirectional camera. , 2013, , . | | 5 |
| 29 | Trail-Map: A scalable landmark data structure for biologically inspired range-free navigation. , 2014, , . | | 4 |
| 30 | Tackling multi-sensory 3D data acquisition and fusion. , 2007, , . | | 3 |
| 31 | Sample consensus fitting of bivariate polynomials for initializing EM-based modeling of smooth 3D surfaces. , 2013, , . | | 2 |
| 32 | Monocular ego-motion estimation with a compact omnidirectional camera. , 2010, , . | | 1 |
| 33 | Trail-Map-based homing under the presence of sensor noise. , 2015, , . | | 1 |
| 34 | DLR VR-SCAN: A versatile and robust miniaturized laser scanner for short range 3D-modelling and exploration in robotics. , 2011, , . | | 0 |
| 35 | Optimisation of gaze movement for multitasking using rewards. , 2011, , . | | 0 |
| 36 | Distributed large scale terrain mapping for mining and autonomous systems. , 2011, , . | | 0 |