# Joaquim Salvi

## List of Publications by Year
in descending order

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|---|---|---|---|
| 110 papers | 5,698 citations | 270111<br>25 h-index | 145109<br>60 g-index |
| 114 all docs | 114 docs citations | 114 times ranked | 4362 citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------| 
| 1 | Transductive Transfer Learning for Domain Adaptation in Brain Magnetic Resonance Image Segmentation. Frontiers in Neuroscience, 2021, 15, 608808. | 1.4 | 5 |
| 2 | A fully convolutional neural network for new T2-w lesion detection in multiple sclerosis. NeuroImage: Clinical, 2020, 25, 102149. | 1.4 | 40 |
| 3 | Multiple Sclerosis Lesion Synthesis in MRI Using an Encoder-Decoder U-NET. IEEE Access, 2019, 7, 25171-25184. | 2.6 | 46 |
| 4 | One-shot domain adaptation in multiple sclerosis lesion segmentation using convolutional neural networks. NeuroImage: Clinical, 2019, 21, 101638. | 1.4 | 91 |
| 5 | GridDS: a hybrid data structure for residue computation in point set matching. Machine Vision and Applications, 2019, 30, 291-307. | 1.7 | 2 |
| 6 | A supervised framework with intensity subtraction and deformation field features for the detection of new T2-w lesions in multiple sclerosis. NeuroImage: Clinical, 2018, 17, 607-615. | 1.4 | 39 |
| 7 | A collection of challenging motion segmentation benchmark datasets. Pattern Recognition, 2017, 61, 1-14. | 5.1 | 6 |
| 8 | 3D registration on mobile platforms using an accelerometer. , 2017, , . | | 0 |
| 9 | Semi–automatic tool for motion annotation on complex video sequences. Electronics Letters, 2016, 52, 602-604. | 0.5 | 2 |
| 10 | An efficient surface registration using smartphone. Machine Vision and Applications, 2016, 27, 559-576. | 1.7 | 8 |
| 11 | Toward persistent autonomous intervention in a subsea panel. Autonomous Robots, 2016, 40, 1279-1306. | 3.2 | 33 |
| 12 | Fourier–based Registration for Robust Forward–looking Sonar Mosaicing in Low–visibility Underwater Environments. Journal of Field Robotics, 2015, 32, 123-151. | 3.2 | 102 |
| 13 | A Qualitative Review on 3D Coarse Registration Methods. ACM Computing Surveys, 2015, 47, 1-36. | 16.1 | 76 |
| 14 | A study on the robustness of shape descriptors to common scanning artifacts. , 2015, , . | | 3 |
| 15 | A New Trajectory Based Motion Segmentation Benchmark Dataset (UdG-MS15). Lecture Notes in Computer Science, 2015, , 463-470. | 1.0 | 2 |
| 16 | Dynamic 3D shape of the plantar surface of the foot using coded structured light: a technical report. Journal of Foot and Ankle Research, 2014, 7, 5. | 0.7 | 12 |
| 17 | Structured light self-calibration with vanishing points. Machine Vision and Applications, 2014, 25, 489-500. | 1.7 | 30 |
| 18 | SLAM with SC-PHD Filters: An Underwater Vehicle Application. IEEE Robotics and Automation Magazine, 2014, 21, 38-45. | 2.2 | 15 |

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|---|---------|-----|-----------|
| 19 | Rotation Estimation for Two-Dimensional Forward-Looking Sonar Mosaicing. Advances in Intelligent Systems and Computing, 2014, , 69-84. | 0.5 | 4 |
| 20 | Joint estimation of segmentation and structure from motion. Computer Vision and Image Understanding, 2013, 117, 113-129. | 3.0 | 17 |
| 21 | Long-term mapping and localization using feature stability histograms. Robotics and Autonomous Systems, 2013, 61, 1539-1558. | 3.0 | 17 |
| 22 | SLAM With Dynamic Targets via Single-Cluster PHD Filtering. IEEE Journal on Selected Topics in Signal Processing, 2013, 7, 543-552. | 7.3 | 78 |
| 23 | One-shot absolute pattern for dense reconstruction using DeBruijn coding and Windowed Fourier Transform. Optics Communications, 2013, 291, 70-78. | 1.0 | 9 |
| 24 | Automatic detection of underwater chain links using a forward-looking sonar. , 2013, , . | | 23 |
| 25 | Single cluster PHD SLAM: Application to autonomous underwater vehicles using stereo vision. , 2013, , . | | 6 |
| 26 | Evaluation of registration methods on two-dimensional forward-looking sonar imagery. , 2013, , . | | 30 |
| 27 | Vertical edge–based mapping using range–augmented omnidirectional vision sensor. IET Computer Vision, 2013, 7, 135-143. | 1.3 | 6 |
| 28 | Projector-camera calibration for 3D reconstruction using vanishing points. , 2012, , . | | 4 |
| 29 | SLAM with single cluster PHD filters. , 2012, , . | | 15 |
| 30 | Fourier-based registrations for two-dimensional forward-looking sonar image mosaicing. , 2012, , . | | 46 |
| 31 | PANDORA: Persistent Autonomy through Learning, Adaptation, Observation and Re-planning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 367-372. | 0.4 | 6 |
| 32 | A novel Structured Light method for one-shot dense reconstruction. , 2012, , . | | 5 |
| 33 | Hierarchical Normal Space Sampling to speed up point cloud coarse matching. Pattern Recognition Letters, 2012, 33, 2127-2133. | 2.6 | 28 |
| 34 | Stereo computation combining structured light and passive stereo matching. Optics Communications, 2012, 285, 1017-1022. | 1.0 | 15 |
| 35 | Simultaneous motion segmentation and Structure from Motion. , 2011, , . | | 4 |
| 36 | Indoor SLAM using a range-augmented omnidirectional vision. , 2011, , . | | 6 |

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|---|---------|----|-----------|
| 37 | Feature extraction for underwater visual SLAM. , 2011, , . | | 33 |
| 38 | Appearance-based mapping and localization for mobile robots using a feature stability histogram. Robotics and Autonomous Systems, 2011, 59, 840-857. | 3.0 | 24 |
| 39 | Automatic window size selection in Windowed Fourier Transform for 3D reconstruction using adapted mother wavelets. Optics Communications, 2011, 284, 2797-2807. | 1.0 | 28 |
| 40 | Enhanced Local Subspace Affinity for feature-based motion segmentation. Pattern Recognition, 2011, 44, 454-470. | 5.1 | 36 |
| 41 | Reconstruction of non-rigid 3D shapes from stereo-motion. Pattern Recognition Letters, 2011, 32, 1020-1028. | 2.6 | 9 |
| 42 | A dynamic 3D foot reconstruction system. , 2011, 2011, 599-602. | | 4 |
| 43 | Adaptive Motion Segmentation Algorithm Based on the Principal Angles Configuration. Lecture Notes in Computer Science, 2011, , 15-26. | 1.0 | 13 |
| 44 | SLAM based Selective Submap Joining for the Victoria Park Dataset. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 557-562. | 0.4 | 1 |
| 45 | Submapping SLAM based on acoustic data from a 6-DOF AUV. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 16-21. | 0.4 | 2 |
| 46 | Efficient multiple phase shift patterns for dense 3D acquisition in structured light scanning. Image and Vision Computing, 2010, 28, 1255-1266. | 2.7 | 61 |
| 47 | A state of the art in structured light patterns for surface profilometry. Pattern Recognition, 2010, 43, 2666-2680. | 5.1 | 691 |
| 48 | Feature based slam using side-scan salient objects. , 2010, , . | | 14 |
| 49 | Calibration of optical camera coupled to acoustic multibeam for underwater 3D scene reconstruction. , 2010, , . | | 21 |
| 50 | Selective Submap Joining for underwater large scale 6-DOF SLAM. , 2010, , . | | 7 |
| 51 | Appearance-based mapping and localisation using feature stability histograms. Electronics Letters, 2010, 46, 1120. | 0.5 | 10 |
| 52 | Local map update for large scale SLAM. Electronics Letters, 2010, 46, 564. | 0.5 | 5 |
| 53 | Acoustic-Based Techniques for Autonomous Underwater Vehicle Localization. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2010, 224, 293-307. | 0.3 | 17 |
| 54 | Absolute phase mapping for one-shot dense pattern projection. , 2010, , . | | 8 |

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|---|---------|-----|-----------|
| 55 | New Trends in Motion Segmentation. , 2009, , . | | 7 |
| 56 | Enhanced Model Selection for motion segmentation. , 2009, , . | | 4 |
| 57 | Rank estimation of trajectory matrix in motion segmentation. Electronics Letters, 2009, 45, 540. | 0.5 | 1 |
| 58 | Efficient and Low-Cost 3D Structured Light System Based on a Modified Number-Theoretic Approach. Eurasip Journal on Advances in Signal Processing, 2009, 2010, . | 1.0 | 19 |
| 59 | Registration of surfaces minimizing error propagation for a one-shot multi-slit hand-held scanner. Pattern Recognition, 2008, 41, 2055-2067. | 5.1 | 18 |
| 60 | Visual SLAM for 3D large-scale seabed acquisition employing underwater vehicles. , 2008, , . | | 8 |
| 61 | A particle filter approach for AUV localization. , 2008, , . | | 35 |
| 62 | Visual SLAM for underwater vehicles using video velocity log and natural landmarks. , 2008, , . | | 25 |
| 63 | Overview of surface registration techniques including loop minimization for three-dimensional modeling and visual inspection. Journal of Electronic Imaging, 2008, 17, 031103. | 0.5 | 5 |
| 64 | Adaptive mission plan diagnosis and repair for fault recovery in autonomous underwater vehicles. , 2008, , . | | 10 |
| 65 | 3D Large-Scale Seabed Reconstruction for UUV Simultaneous Localization and Mapping. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 19-24. | 0.4 | 2 |
| 66 | 2D virtual texture on 3D real object with coded structured light. , 2008, , . | | 4 |
| 67 | Design Patterns for Combining Social and Individual Intelligences on Modular-Based Agents. Lecture Notes in Computer Science, 2008, , 70-77. | 1.0 | 1 |
| 68 | Automatic texture mapping on real 3D model. , 2007, , . | | 3 |
| 69 | Detection of surfaces for projection of texture. , 2007, , . | | 0 |
| 70 | Overview of 3D registration techniques including loop minimization for the complete acquisition of large manufactured parts and complex environments. , 2007, , . | | 1 |
| 71 | Catadioptric single-shot rangefinder for textured map building in robot navigation. IET Computer Vision, 2007, 1, 43-53. | 1.3 | 6 |
| 72 | A review of recent range image registration methods with accuracy evaluation. Image and Vision Computing, 2007, 25, 578-596. | 2.7 | 541 |

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| 73 | A multi-agent architecture with cooperative fuzzy control for a mobile robot. Robotics and Autonomous Systems, 2007, 55, 881-891. | 3.0 | 50 |
| 74 | Summarizing Image/Surface Registration for 6DOF Robot/Camera Pose Estimation. Lecture Notes in Computer Science, 2007, , 105-112. | 1.0 | 3 |
| 75 | Optimizing plane-to-plane positioning tasks by image-based visual servoing and structured light. , 2006, 22, 1000-1010. | | 29 |
| 76 | A refined range image registration technique for multi-stripe laser scanner. , 2006, 6070, 246. | | 3 |
| 77 | Review of CMOS image sensors. Microelectronics Journal, 2006, 37, 433-451. | 1.1 | 445 |
| 78 | Modelling and accuracy estimation of a new omnidirectional depth computation sensor. Pattern Recognition Letters, 2006, 27, 843-853. | 2.6 | 22 |
| 79 | A Computer Vision Sensor for Panoramic Depth Perception. Lecture Notes in Computer Science, 2005, , 153-160. | 1.0 | 0 |
| 80 | Registration of Moving Surfaces by Means of One-Shot Laser Projection. Lecture Notes in Computer Science, 2005, , 145-152. | 1.0 | 2 |
| 81 | Optimised De Bruijn patterns for one-shot shape acquisition. Image and Vision Computing, 2005, 23, 707-720. | 2.7 | 126 |
| 82 | Accuracy estimation of a new omnidirectional 3D vision sensor. , 2005, , . | | 4 |
| 83 | Robust decoupled visual servoing based on structured light. , 2005, , . | | 7 |
| 84 | Range image registration for industrial inspection. , 2005, , . | | 12 |
| 85 | Surface registration from range image fusion. , 2004, , . | | 8 |
| 86 | Pattern codification strategies in structured light systems. Pattern Recognition, 2004, 37, 827-849. | 5.1 | 976 |
| 87 | Codesign methodology for computer vision applications. Microprocessors and Microsystems, 2004, 28, 303-316. | 1.8 | 3 |
| 88 | A new optimised De Bruijn coding strategy for structured light patterns. , 2004, , . | | 21 |
| 89 | Laser stripe peak detector for 3D scanners. A FIR filter approach. , 2004, , . | | 71 |
| 90 | Uncalibrated reconstruction: an adaptation to structured light vision. Pattern Recognition, 2003, 36, 1631-1644. | 5.1 | 32 |

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| 91 | A review on egomotion by means of differential epipolar geometry applied to the movement of a mobile robot. Pattern Recognition, 2003, 36, 2927-2944. | 5.1 | 30 |
| 92 | Overall view regarding fundamental matrix estimation. Image and Vision Computing, 2003, 21, 205-220. | 2.7 | 164 |
| 93 | Calibration of A Structured Light-Based Stereo Catadioptric Sensor. , 2003, , . | | 8 |
| 94 | Robust Segmentation and Decoding of a~Grid Pattern for Structured Light. Lecture Notes in Computer Science, 2003, , 689-696. | 1.0 | 5 |
| 95 | A New Approach to Pose Detection using a Trinocular Stereovision System. Real Time Imaging, 2002, 8, 73-93. | 1.6 | 11 |
| 96 | A comparative review of camera calibrating methods with accuracy evaluation. Pattern Recognition, 2002, 35, 1617-1635. | 5.1 | 389 |
| 97 | Recent progress in coded structured light as a technique to solve the correspondence problem. Pattern Recognition, 1998, 31, 963-982. | 5.1 | 363 |
| 98 | A robust-coded pattern projection for dynamic 3D scene measurement. Pattern Recognition Letters, 1998, 19, 1055-1065. | 2.6 | 151 |
| 99 | Behaviours implemented using a vision system based on coded light projection. , 1998, , . | | 1 |
| 100 | Recent progress in structured light in order to solve the correspondence problem in stereovision. , 0, , . | | 26 |
| 101 | Uncalibrated vision based on structured light. , 0, , . | | 14 |
| 102 | A survey addressing the fundamental matrix estimation problem. , 0, , . | | 11 |
| 103 | Differential epipolar constraint in mobile robot egomotion estimation. , 0, , . | | 4 |
| 104 | A review of laser scanning three-dimensional digitisers. , 0, , . | | 28 |
| 105 | Overview of coded light projection techniques for automatic 3D profiling. , 0, , . | | 56 |
| 106 | Implementation of a robust coded structured light technique for dynamic 3D measurements. , 0, , . | | 9 |
| 107 | Plane-to-plane positioning from image-based visual servoing and structured light. , 0, , . | | 6 |
| 108 | Omnidirectional Depth Computation from a Single Image. , 0, , . | | 16 |

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|---|---------|----|-----------|
| 109 | A Camera-Projector System for Robot Positioning by Visual Servoing. , 0, , . | | 5 |
| 110 | An approach to visual servoing based on coded light. , 0, , . | | 21 |