

# Maarten Vergauwen

## List of Publications by Year in descending order

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Version: 2024-02-01

71  
papers

1,945  
citations

516561

16  
h-index

345118

36  
g-index

72  
all docs

72  
docs citations

72  
times ranked

1377  
citing authors

#	ARTICLE	IF	CITATIONS
1	Visual Modeling with a Hand-Held Camera. International Journal of Computer Vision, 2004, 59, 207-232.	10.9	694
2	Web-based 3D Reconstruction Service. Machine Vision and Applications, 2006, 17, 411-426.	1.7	161
3	Automated reconstruction of 3D scenes from sequences of images. ISPRS Journal of Photogrammetry and Remote Sensing, 2000, 55, 251-267.	4.9	136
4	A Hierarchical Symmetric Stereo Algorithm Using Dynamic Programming. International Journal of Computer Vision, 2002, 47, 275-285.	10.9	86
5	3D Reconstruction from Multiple Images Part 1: Principles. Foundations and Trends in Computer Graphics and Vision, 2008, 4, 287-404.	2.8	82
6	Metric 3D Surface Reconstruction from Uncalibrated Image Sequences. Lecture Notes in Computer Science, 1998, , 139-154.	1.0	65
7	Classification of sensor independent point cloud data of building objects using random forests. Journal of Building Engineering, 2019, 21, 468-477.	1.6	51
8	Unsupervised reconstruction of Building Information Modeling wall objects from point cloud data. Automation in Construction, 2020, 120, 103338.	4.8	46
9	A stereo-vision system for support of planetary surface exploration. Machine Vision and Applications, 2003, 14, 5-14.	1.7	40
10	3D recording for archaeological fieldwork. IEEE Computer Graphics and Applications, 2003, 23, 20-27.	1.0	38
11	<title>Three-dimensional scene reconstruction from images</title> . , 2000, 3958, 215.		34
12	Image-based 3D acquisition of archaeological heritage and applications. , 2001, , .		34
13	AUTOMATED CLASSIFICATION OF HERITAGE BUILDINGS FOR AS-BUILT BIM USING MACHINE LEARNING TECHNIQUES. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, IV-2/W2, 25-30.	0.0	33
14	Augmented Reality Using Uncalibrated Video Sequences. Lecture Notes in Computer Science, 2001, , 144-160.	1.0	31
15	Hand-held acquisition of 3D models with a video camera. , 0, , .		30
16	Point Cloud vs. Mesh Features for Building Interior Classification. Remote Sensing, 2020, 12, 2224.	1.8	23
17	Topology Reconstruction of BIM Wall Objects from Point Cloud Data. Remote Sensing, 2020, 12, 1800.	1.8	22
18	Implementation of Scan-to-BIM and FEM for the Documentation and Analysis of Heritage Timber Roof Structures. Lecture Notes in Computer Science, 2016, , 79-90.	1.0	22

#	ARTICLE	IF	CITATIONS
19	SEGMENTATION OF LARGE UNSTRUCTURED POINT CLOUDS USING OCTREE-BASED REGION GROWING AND CONDITIONAL RANDOM FIELDS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W8, 25-30.	0.2	21
20	Drift Invariant Metric Quality Control of Construction Sites Using BIM and Point Cloud Data. ISPRS International Journal of Geo-Information, 2020, 9, 545.	1.4	18
21	Clustering of Wall Geometry from Unstructured Point Clouds Using Conditional Random Fields. Remote Sensing, 2019, 11, 1586.	1.8	17
22	Point Cloud Validation: On the Impact of Laser Scanning Technologies on the Semantic Segmentation for BIM Modeling and Evaluation. Remote Sensing, 2022, 14, 582.	1.8	16
23	An Overview of Innovative Heritage Deliverables Based on Remote Sensing Techniques. Remote Sensing, 2018, 10, 1607.	1.8	13
24	Semi-automated Creation of Accurate FE Meshes of Heritage Masonry Walls from Point Cloud Data. RILEM Bookseries, 2019, , 305-314.	0.2	13
25	SCAN-TO-BIM OUTPUT VALIDATION: TOWARDS A STANDARDIZED GEOMETRIC QUALITY ASSESSMENT OF BUILDING INFORMATION MODELS BASED ON POINT CLOUDS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W8, 45-52.	0.2	13
26	Manhole Cover Detection on Rasterized Mobile Mapping Point Cloud Data Using Transfer Learned Fully Convolutional Neural Networks. Remote Sensing, 2020, 12, 3820.	1.8	12
27	Including widespread geometry formats in semantic graphs using RDF literals. , 2019, , .		12
28	Comparison of 2D and 3D wall reconstruction algorithms from point cloud data for as-built BIM. Journal of Information Technology in Construction, 2020, 25, 173-192.	1.4	12
29	IFCWALL RECONSTRUCTION FROM UNSTRUCTURED POINT CLOUDS. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, IV-2, 33-39.	0.0	12
30	IMMERSIVE VISUALISATION OF CONSTRUCTION SITE POINT CLOUD DATA, MESHES AND BIM MODELS IN A VR ENVIRONMENT USING A GAMING ENGINE. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-5/W2, 77-83.	0.2	12
31	3D Challenges and a Non-In-Depth Overview of Recent Progress. , 2007, , .		10
32	Processing existing building geometry for reuse as Linked Data. Automation in Construction, 2020, 115, 103180.	4.8	9
33	Flexible 3D acquisition with a monocular camera. , 0, , .		8
34	Low-Complexity Design and Validation of Wireless Motion Sensor Node to Support Physiotherapy. Sensors, 2020, 20, 6362.	2.1	7
35	A Stereo Vision System for Support of Planetary Surface Exploration. Lecture Notes in Computer Science, 2001, , 298-312.	1.0	7
36	A micro-rover navigation and control system for autonomous planetary exploration. Advanced Robotics, 2004, 18, 285-314.	1.1	6

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37	V4Design for Enhancing Architecture and Video Game Creation. , 2018, , .		6
38	Vision on Conservation: Virterf. , 2001, , 125-132.		6
39	Automated Semantic Labelling of 3D Vector Models for Scan-to-BIM. , 2016, , .		6
40	BIM RECONSTRUCTION: AUTOMATED PROCEDURAL MODELING FROM POINT CLOUD DATA. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W17, 53-60.	0.2	6
41	Two-Step Alignment of Mixed Reality Devices to Existing Building Data. Remote Sensing, 2022, 14, 2680.	1.8	5
42	A hierarchical stereo algorithm using dynamic programming. , 0, , .		4
43	Panoramic Image Application for Cultural Heritage. Lecture Notes in Computer Science, 2018, , 386-395.	1.0	4
44	Numerical Analysis of Settlement-Induced Damage to a Masonry Church Nave Wall. RILEM Bookseries, 2019, , 853-861.	0.2	4
45	Including widespread geometry schemas into Linked Data-based BIM applied to built heritage. Proceedings of the Institution of Civil Engineers - Smart Infrastructure and Construction, 2019, 172, 34-51.	1.1	4
46	Virtual Models from Video and Vice-Versa. , 2001, , 11-22.		4
47	PUZZLING ENGINE: A DIGITAL PLATFORM TO AID THE REASSEMBLING OF FRACTURED FRAGMENTS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W15, 563-570.	0.2	4
48	PERCENTAGE OF COMPLETION OF IN-SITU CAST CONCRETE WALLS USING POINT CLOUD DATA AND BIM. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-5/W2, 21-28.	0.2	4
49	STANDALONE TERRESTRIAL LASER SCANNING FOR EFFICIENTLY CAPTURING AEC BUILDINGS FOR AS-BUILT BIM. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, III-6, 49-55.	0.0	4
50	From TLS Recoding to VR Environment for Documentation of the Governor's Tombs in Dayr al-Barsha, Egypt. , 2018, , .		3
51	Vision-Based Methodology for Characterizing the Flow of a High-Density Crowd on Footbridges: Strategy and Application. Infrastructures, 2020, 5, 51.	1.4	3
52	A Hybrid Approach to Reassemble Ancient Decorated Block Fragments through a 3D Puzzling Engine. Remote Sensing, 2020, 12, 2526.	1.8	3
53	Geo-Registering Consecutive Construction Site Recordings Using a Pre-Registered Reference Module. Remote Sensing, 2020, 12, 1928.	1.8	3
54	THEORETICAL ACCURACY PREDICTION AND VALIDATION OF LOW-END AND HIGH-END MOBILE MAPPING SYSTEM IN URBAN, RESIDENTIAL AND RURAL AREAS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W18, 121-128.	0.2	3

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55	IMAGE RECORDING CHALLENGES FOR PHOTOGRAMMETRIC CONSTRUCTION SITE MONITORING. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W9, 747-753.	0.2	3
56	Combining image and model based rendering of an archaeological site. Signal Processing: Image Communication, 2005, 20, 891-906.	1.8	2
57	WEAR++: 3D model driven camera tracking on board the International Space Station. , 2011, , .		2
58	Deep Learning on Construction Sites: A Case Study of Sparse Data Learning Techniques for Rebar Segmentation. Sensors, 2021, 21, 5428.	2.1	2
59	CLUSTERING OF WALL GEOMETRY FROM UNSTRUCTURED POINT CLOUDS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W9, 101-108.	0.2	2
60	Realistic Textures for Virtual Anastylis. , 2003, , .		1
61	Real-Time Image Based Rendering from Uncalibrated Images. , 0, , .		1
62	Exploring Past and Present: VR Reconstruction of the Berlin Gendarmenmarkt. , 2018, , .		1
63	Towards the Semantic Enrichment of Existing Online 3D Building Geometry to Publish Linked Building Data. Communications in Computer and Information Science, 2019, , 134-148.	0.4	1
64	REMOTE SENSING DATA AS BASIS FOR THE MODELLING AND REASSEMBLY OF DISMANTLED HERITAGE STRUCTURES. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W15, 1187-1194.	0.2	1
65	A Generative and Entropy-Based Registration Approach for the Reassembly of Ancient Inscriptions. Remote Sensing, 2022, 14, 6.	1.8	1
66	3D modeling for communications. , 0, , .		0
67	Calibration and 3D measurement from Martian terrain images. , 0, , .		0
68	1st International Workshop on Multimedia Analysis for Architecture, Design and Virtual Reality Games (MADV 2018). , 2018, , .		0
69	GEO-REGISTERING CONSECUTIVE DATASETS BY MEANS OF A REFERENCE DATASET, ELIMINATING GROUND CONTROL POINT INDICATION. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-5/W2, 85-91.	0.2	0
70	SEMI-AUTOMATED TOPOLOGY ADJUSTMENT OF PARTIAL WALL GEOMETRY. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-5/W3, 13-19.	0.2	0
71	3D Laser scanning for FEM-based deformation analysis of a reconstructed masonry vault. , 2020, , 137-144.		0