# Bi-sheng Yang

List of Publications by Year
in descending order

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|---|---|---|---|
| 116 papers | 4,719 citations | 87723 38 h-index | 110170 64 g-index |
| 119 all docs | 119 docs citations | 119 times ranked | 3259 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | International benchmarking of terrestrial laser scanning approaches for forest inventories. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 144, 137-179. | 4.9 | 254 |
| 2 | Registration of large-scale terrestrial laser scanner point clouds: A review and benchmark. ISPRS Journal of Photogrammetry and Remote Sensing, 2020, 163, 327-342. | 4.9 | 220 |
| 3 | Using mobile laser scanning data for automated extraction of road markings. ISPRS Journal of Photogrammetry and Remote Sensing, 2014, 87, 93-107. | 4.9 | 205 |
| 4 | Semi-automated extraction and delineation of 3D roads of street scene from mobile laser scanning point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 79, 80-93. | 4.9 | 194 |
| 5 | Hierarchical extraction of urban objects from mobile laser scanning data. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 99, 45-57. | 4.9 | 181 |
| 6 | A shape-based segmentation method for mobile laser scanning point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 81, 19-30. | 4.9 | 173 |
| 7 | Satellite-derived bathymetry using the ICESat-2 lidar and Sentinel-2 imagery datasets. Remote Sensing of Environment, 2020, 250, 112047. | 4.6 | 149 |
| 8 | Automated Extraction of Road Markings from Mobile Lidar Point Clouds. Photogrammetric Engineering and Remote Sensing, 2012, 78, 331-338. | 0.3 | 128 |
| 9 | The design and implementation of SPIRIT: a spatially aware search engine for information retrieval on the Internet. International Journal of Geographical Information Science, 2007, 21, 717-745. | 2.2 | 127 |
| 10 | Automatic registration of large-scale urban scene point clouds based on semantic feature points. ISPRS Journal of Photogrammetry and Remote Sensing, 2016, 113, 43-58. | 4.9 | 122 |
| 11 | A new method for 3D individual tree extraction using multispectral airborne LiDAR point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 144, 400-411. | 4.9 | 109 |
| 12 | An efficient global energy optimization approach for robust 3D plane segmentation of point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 137, 112-133. | 4.9 | 104 |
| 13 | Automatic registration of UAV-borne sequent images and LiDAR data. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 101, 262-274. | 4.9 | 103 |
| 14 | Automated registration of dense terrestrial laser-scanning point clouds using curves. ISPRS Journal of Photogrammetry and Remote Sensing, 2014, 95, 109-121. | 4.9 | 93 |
| 15 | A novel binary shape context for 3D local surface description. ISPRS Journal of Photogrammetry and Remote Sensing, 2017, 130, 431-452. | 4.9 | 91 |
| 16 | Hierarchical registration of unordered TLS point clouds based on binary shape context descriptor. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 144, 61-79. | 4.9 | 87 |
| 17 | Land surface temperature relation with normalized satellite indices for the estimation of spatio-temporal trends in temperature among various land use land cover classes of an arid Potohar region using Landsat data. Environmental Earth Sciences, 2020, 79, 1. | 1.3 | 83 |
| 18 | Computing multiple aggregation levels and contextual features for road facilities recognition using mobile laser scanning data. ISPRS Journal of Photogrammetry and Remote Sensing, 2017, 126, 180-194. | 4.9 | 80 |

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|---|---------|-----|-----------|
| 19 | Two-step adaptive extraction method for ground points and breaklines from lidar point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2016, 119, 373-389. | 4.9 | 79 |
| 20 | Automated extraction of street-scene objects from mobile lidar point clouds. International Journal of Remote Sensing, 2012, 33, 5839-5861. | 1.3 | 69 |
| 21 | Automatic Forest Mapping at Individual Tree Levels from Terrestrial Laser Scanning Point Clouds with a Hierarchical Minimum Cut Method. Remote Sensing, 2016, 8, 372. | 1.8 | 68 |
| 22 | Semiautomated Building Facade Footprint Extraction From Mobile LiDAR Point Clouds. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 766-770. | 1.4 | 66 |
| 23 | A probabilistic relaxation approach for matching road networks. International Journal of Geographical Information Science, 2013, 27, 319-338. | 2.2 | 64 |
| 24 | A polygon-based approach for matching OpenStreetMap road networks with regional transit authority data. International Journal of Geographical Information Science, 2016, 30, 748-764. | 2.2 | 62 |
| 25 | Automatic Clearance Anomaly Detection for Transmission Line Corridors Utilizing UAV-Borne LIDAR Data. Remote Sensing, 2018, 10, 613. | 1.8 | 62 |
| 26 | An automated method to register airborne and terrestrial laser scanning point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 109, 62-76. | 4.9 | 61 |
| 27 | Automated Extraction of 3-D Railway Tracks from Mobile Laser Scanning Point Clouds. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 4750-4761. | 2.3 | 58 |
| 28 | Automated Extraction of Building Outlines From Airborne Laser Scanning Point Clouds. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1399-1403. | 1.4 | 57 |
| 29 | A Multi-parameter Approach to Automated Building Grouping and Generalization. GeoInformatica, 2008, 12, 73-89. | 2.0 | 54 |
| 30 | 3D local feature BKD to extract road information from mobile laser scanning point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2017, 130, 329-343. | 4.9 | 50 |
| 31 | A multi-resolution model of vector map data for rapid transmission over the Internet. Computers and Geosciences, 2005, 31, 569-578. | 2.0 | 49 |
| 32 | Efficient transmission of vector data over the Internet. International Journal of Geographical Information Science, 2007, 21, 215-237. | 2.2 | 49 |
| 33 | Automatic 3-D Reconstruction of Indoor Environment With Mobile Laser Scanning Point Clouds. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 3117-3130. | 2.3 | 49 |
| 34 | Automatic Extraction of High-Voltage Power Transmission Objects from UAV Lidar Point Clouds. Remote Sensing, 2019, 11, 2600. | 1.8 | 48 |
| 35 | Generating hierarchical strokes from urban street networks based on spatial pattern recognition. International Journal of Geographical Information Science, 2011, 25, 2025-2050. | 2.2 | 46 |
| 36 | Automated Reconstruction of Building LoDs from Airborne LiDAR Point Clouds Using an Improved Morphological Scale Space. Remote Sensing, 2017, 9, 14. | 1.8 | 45 |

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|---|---------|-----|-----------|
| 37 | A point-based deep learning network for semantic segmentation of MLS point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2021, 175, 199-214. | 4.9 | 44 |
| 38 | Calibrate Multiple Consumer RGB-D Cameras for Low-Cost and Efficient 3D Indoor Mapping. Remote Sensing, 2018, 10, 328. | 1.8 | 42 |
| 39 | An adaptive method for identifying the spatial patterns in road networks. Computers, Environment and Urban Systems, 2010, 34, 40-48. | 3.3 | 41 |
| 40 | An integrated TIN and Grid method for constructing multiâ€resolution digital terrain models. International Journal of Geographical Information Science, 2005, 19, 1019-1038. | 2.2 | 40 |
| 41 | An object-oriented data model for complex objects in three-dimensional geographical information systems. International Journal of Geographical Information Science, 2003, 17, 411-430. | 2.2 | 39 |
| 42 | 3D Forest Mapping Using A Low-Cost UAV Laser Scanning System: Investigation and Comparison. Remote Sensing, 2019, 11, 717. | 1.8 | 39 |
| 43 | Automated fusion of forest airborne and terrestrial point clouds through canopy density analysis. ISPRS Journal of Photogrammetry and Remote Sensing, 2019, 156, 94-107. | 4.9 | 37 |
| 44 | NRLI-UAV: Non-rigid registration of sequential raw laser scans and images for low-cost UAV LiDAR point cloud quality improvement. ISPRS Journal of Photogrammetry and Remote Sensing, 2019, 158, 123-145. | 4.9 | 37 |
| 45 | Automatic registration of panoramic image sequence and mobile laser scanning data using semantic features. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 136, 41-57. | 4.9 | 36 |
| 46 | Seabed sediment classification using multibeam backscatter data based on the selecting optimal random forest model. Applied Acoustics, 2020, 167, 107387. | 1.7 | 34 |
| 47 | Estimation of Forest Structural Attributes Using Spectral Indices and Point Clouds from UAS-Based Multispectral and RGB Imageries. Remote Sensing, 2019, 11, 800. | 1.8 | 32 |
| 48 | A top-down strategy for buildings extraction from complex urban scenes using airborne LiDAR point clouds. Infrared Physics and Technology, 2018, 92, 203-218. | 1.3 | 30 |
| 49 | An Accurate TLS and UAV Image Point Clouds Registration Method for Deformation Detection of Chaotic Hillside Areas. Remote Sensing, 2019, 11, 647. | 1.8 | 29 |
| 50 | An efficient method of monitoring slow-moving landslides with long-range terrestrial laser scanning: a case study of the Dashu landslide in the Three Gorges Reservoir Region, China. Landslides, 2019, 16, 839-855. | 2.7 | 29 |
| 51 | Polygon-based approach for extracting multilane roads from OpenStreetMap urban road networks. International Journal of Geographical Information Science, 2014, 28, 2200-2219. | 2.2 | 28 |
| 52 | Dynamic occlusion detection and inpainting of in situ captured terrestrial laser scanning point clouds sequence. ISPRS Journal of Photogrammetry and Remote Sensing, 2016, 119, 90-107. | 4.9 | 28 |
| 53 | A maximum bathymetric depth model to simulate satellite photon-counting lidar performance. ISPRS Journal of Photogrammetry and Remote Sensing, 2021, 174, 182-197. | 4.9 | 28 |
| 54 | Geometric structure simplification of 3D building models. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 84, 100-113. | 4.9 | 27 |

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| 55 | Geometric-based approach for integrating VGI POIs and road networks. International Journal of Geographical Information Science, 2014, 28, 126-147. | 2.2 | 26 |
| 56 | Acoustic Seabed Classification Based on Multibeam Echosounder Backscatter Data Using the PSO-BP-AdaBoost Algorithm: A Case Study From Jiaozhou Bay, China. IEEE Journal of Oceanic Engineering, 2021, 46, 509-519. | 2.1 | 25 |
| 57 | A two-stage approach for road marking extraction and modeling using MLS point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2021, 180, 255-268. | 4.9 | 22 |
| 58 | Hierarchical model of road network for route planning in vehicle navigation systems. IEEE Intelligent Transportation Systems Magazine, 2009, 1, 20-24. | 2.6 | 20 |
| 59 | A Pattern€Based Approach for Matching Nodes in Heterogeneous Urban Road Networks. Transactions in GIS, 2014, 18, 718-739. | 1.0 | 20 |
| 60 | Autonomous Vehicle Localization with Prior Visual Point Cloud Map Constraints in GNSS-Challenged Environments. Remote Sensing, 2021, 13, 506. | 1.8 | 20 |
| 61 | Constructing multi-resolution triangulated irregular network model for visualization. Computers and Geosciences, 2005, 31, 77-86. | 2.0 | 19 |
| 62 | Iterative Global Similarity Points: A Robust Coarse-to-Fine Integration Solution for Pairwise 3D Point Cloud Registration. , 2018, , . | | 19 |
| 63 | Towards Reconstructing 3D Buildings from ALS Data Based on Gestalt Laws. Remote Sensing, 2018, 10, 1127. | 1.8 | 19 |
| 64 | Automated 3D Road Boundary Extraction and Vectorization Using MLS Point Clouds. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 5287-5297. | 4.7 | 19 |
| 65 | CG-SSD: Corner guided single stage 3D object detection from LiDAR point cloud. ISPRS Journal of Photogrammetry and Remote Sensing, 2022, 191, 33-48. | 4.9 | 17 |
| 66 | Pattern-mining approach for conflating crowdsourcing road networks with POIs. International Journal of Geographical Information Science, 2015, 29, 786-805. | 2.2 | 15 |
| 67 | A terrain openness index for the extraction of karst Fenglin and Fengcong landform units from DEMs. Journal of Mountain Science, 2018, 15, 752-764. | 0.8 | 15 |
| 68 | Extracting buildings from airborne laser scanning point clouds using a marked point process. GIScience and Remote Sensing, 2014, 51, 555-574. | 2.4 | 14 |
| 69 | 3D-CSTM: A 3D continuous spatio-temporal mapping method. ISPRS Journal of Photogrammetry and Remote Sensing, 2022, 186, 232-245. | 4.9 | 14 |
| 70 | Variable-resolution Compression of Vector Data. GeoInformatica, 2008, 12, 357-376. | 2.0 | 13 |
| 71 | A novel skyline context descriptor for rapid localization of terrestrial laser scans to airborne laser scanning point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2020, 165, 120-132. | 4.9 | 13 |
| 72 | Exploring the Impact of 2-D/3-D Building Morphology on the Land Surface Temperature:A Case Study of Three Megacities in China. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 4933-4945. | 2.3 | 13 |

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| 73 | Multi-resolution representation of digital terrain models with terrain features preservation. Science in China Series D: Earth Sciences, 2008, 51, 145-154. | 0.9 | 11 |
| 74 | Efficient compression of vector data map based on a clustering model. Geo-Spatial Information Science, 2009, 12, 13-17. | 2.4 | 11 |
| 75 | Novel Adaptive Laser Scanning Method for Point Clouds of Free-Form Objects. Sensors, 2018, 18, 2239. | 2.1 | 11 |
| 76 | A hierarchical approach for refining point cloud quality of a low cost UAV LiDAR system in the urban environment. ISPRS Journal of Photogrammetry and Remote Sensing, 2022, 183, 403-421. | 4.9 | 11 |
| 77 | A Dynamic Method for Generating Multi-Resolution TIN Models. Photogrammetric Engineering and Remote Sensing, 2005, 71, 917-926. | 0.3 | 10 |
| 78 | Editorial: Some thoughts on progressive transmission of spatial datasets in the web environment. Computers and Geosciences, 2009, 35, 2175-2176. | 2.0 | 10 |
| 79 | Fast registration of forest terrestrial laser scans using key points detected from crowns and stems. International Journal of Digital Earth, 2020, 13, 1585-1603. | 1.6 | 10 |
| 80 | A Coarse-to-Fine Strip Mosaicing Model for Airborne Bathymetric LiDAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 8129-8142. | 2.7 | 10 |
| 81 | A Strip Adjustment Method of UAV-Borne LiDAR Point Cloud Based on DEM Features for Mountainous Area. Sensors, 2021, 21, 2782. | 2.1 | 9 |
| 82 | Compositional Structure Recognition of 3D Building Models Through Volumetric Analysis. IEEE Access, 2018, 6, 33953-33968. | 2.6 | 8 |
| 83 | Improved Priority–Flood method for depression filling by redundant calculation optimization in local micro–relief areas. Transactions in GIS, 2019, 23, 259-274. | 1.0 | 8 |
| 84 | Highway alignments extraction and 3D modeling from airborne laser scanning point clouds. International Journal of Applied Earth Observation and Geoinformation, 2021, 102, 102429. | 1.4 | 8 |
| 85 | JoKDNet: A joint keypoint detection and description network for large-scale outdoor TLS point clouds registration. International Journal of Applied Earth Observation and Geoinformation, 2021, 104, 102534. | 1.4 | 8 |
| 86 | Extraction 3D road boundaries from mobile laser scanning point clouds. , 2015, , . | | 7 |
| 87 | A Triangular Prism Spatial Interpolation Method for Mapping Geological Property Fields. ISPRS International Journal of Geo-Information, 2017, 6, 241. | 1.4 | 7 |
| 88 | HPM-TDP: An efficient hierarchical PatchMatch depth estimation approach using tree dynamic programming. ISPRS Journal of Photogrammetry and Remote Sensing, 2019, 155, 37-57. | 4.9 | 7 |
| 89 | Multi-resolution representation of 3D complex building models with features preservation. , 2011, , . | | 6 |
| 90 | Density-Adaptive and Geometry-Aware Registration of TLS Point Clouds Based on Coherent Point Drift. IEEE Geoscience and Remote Sensing Letters, 2020, 17, 1628-1632. | 1.4 | 6 |

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| 91 | Mapping the spatio-temporal visibility of global navigation satellites in the urban road areas based on panoramic imagery. International Journal of Digital Earth, 2021, 14, 807-820. | 1.6 | 6 |
| 92 | USING MOBILE LASER SCANNING DATA FOR FEATURES EXTRACTION OF HIGH ACCURACY DRIVING MAPS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLI-B3, 433-439. | 0.2 | 6 |
| 93 | Street-view imagery guided street furniture inventory from mobile laser scanning point clouds. ISPRS Journal of Photogrammetry and Remote Sensing, 2022, 189, 63-77. | 4.9 | 6 |
| 94 | Hierarchical route planning based on taxi GPS-trajectories. , 2009, , . | | 5 |
| 95 | Mobile mapping with ubiquitous point clouds. Geo-Spatial Information Science, 2016, 19, 169-170. | 2.4 | 5 |
| 96 | A Bidirectional Analysis Method for Extracting Glacier Crevasses from Airborne LiDAR Point Clouds. Remote Sensing, 2019, 11, 2373. | 1.8 | 5 |
| 97 | A Probabilistic Method for Fractured Cultural Relics Automatic Reassembly. Journal on Computing and Cultural Heritage, 2021, 14, 1-25. | 1.2 | 5 |
| 98 | Dense 3D surface reconstruction of large-scale streetscape from vehicle-borne imagery and LiDAR. International Journal of Digital Earth, 2021, 14, 619-639. | 1.6 | 5 |
| 99 | Geometric feature enhanced line segment extraction from large-scale point clouds with hierarchical topological optimization. International Journal of Applied Earth Observation and Geoinformation, 2022, 112, 102858. | 0.9 | 5 |
| 100 | Editorial for Special Issue: â€œRemote Sensing based Building Extractionâ€• Remote Sensing, 2020, 12, 549. | 1.8 | 4 |
| 101 | USING MOBILE LASER SCANNING DATA FOR FEATURES EXTRACTION OF HIGH ACCURACY DRIVING MAPS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLI-B3, 433-439. | 0.2 | 4 |
| 102 | A robust and rapid algorithm for generating and transmitting multi-resolution three-dimensional models. Science Bulletin, 2006, 51, 987-993. | 1.7 | 3 |
| 103 | K Nearest Neighbors search considering traffic restriction for Location Based Service. , 2009, , . | | 3 |
| 104 | Automated abstraction of building models for 3D navigation on mobile devices. , 2011, , . | | 3 |
| 105 | Multilevel Solar Potential Analysis of Building Based on Ubiquitous Point Clouds. , 2018, , . | | 2 |
| 106 | Integrated environmental and human observations for smart cities. Environment and Planning B: Urban Analytics and City Science, 2021, 48, 1375-1379. | 1.0 | 2 |
| 107 | Confidence-guided roadside individual tree extraction for ecological benefit estimation. International Journal of Applied Earth Observation and Geoinformation, 2021, 102, 102368. | 1.4 | 2 |
| 108 | Feature-Preserved Geometry Simplification of Triangular Meshes from LiDAR Sensor. Sensor Letters, 2013, 11, 787-795. | 0.4 | 2 |

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| 109 | LOW COST AND EFFICIENT 3D INDOOR MAPPING USING MULTIPLE CONSUMER RGB-D CAMERAS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLI-B1, 169-174. | 0.2 | 2 |
| 110 | A view‐dependent method for the multi‐resolution representation of terrains with roads embedded. International Journal of Remote Sensing, 2007, 28, 319-334. | 1.3 | 1 |
| 111 | Integrating Multi-Source POIs and Road Networks Based on Geometric Data. , 2013, , . | | 1 |
| 112 | Spatial data Internet progressive transmission control based on the geometric shapes similarity. International Journal of Control, Automation and Systems, 2014, 12, 1110-1117. | 1.6 | 1 |
| 113 | Feature fusion-based registration of satellite images to airborne LiDAR bathymetry in island area. International Journal of Applied Earth Observation and Geoinformation, 2022, 109, 102778. | 0.9 | 1 |
| 114 | An MRDB approach for propagating updates across navigable maps at different resolutions. , 2009, , . | | 0 |
| 115 | A framework of spatio-temporal data adaptive visualizations for mobile environment. , 2009, , . | | 0 |
| 116 | Automatic registration of multi-view terrestrial laser scanning point clouds in complex urban environments. , 2015, , . | | 0 |