Lorenz Hurni

List of Publications by Year
in descending order

65 papers	616 citations	567144 15 h-index	677027 22 g-index
69 all docs	69 docs citations	69 times ranked	525 citing authors

#	Article	IF	Citations
1	Instance Segmentation, Body Part Parsing, and Pose Estimation of Human Figures in Pictorial Maps. International Journal of Cartography, 2022, 8, 291-307.	0.2	2
2	Leveraging uncertainty estimation and spatial pyramid pooling for extracting hydrological features from scanned historical topographic maps. GIScience and Remote Sensing, 2022, 59, 200-214.	2.4	11
3	Terrain Segmentation Using a U-Net for Improved Relief Shading. ISPRS International Journal of Geo-Information, 2022, 11, 395.	1.4	0
4	Cartographic Relief Shading with Neural Networks. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 1225-1235.	2.9	19
5	Detection of Pictorial Map Objects with Convolutional Neural Networks. Cartographic Journal, 2021, 58, 50-68.	0.8	8
6	A survey of road feature extraction methods from raster maps. Transactions in GIS, 2021, 25, 2734-2763.	1.0	18
7	Modelling the functional capacity losses of networks exposed to hazards. Sustainable and Resilient Infrastructure, 2020, 5, 30-48.	1.7	7
8	Comparison of Relief Shading Techniques Applied to Landforms. ISPRS International Journal of Geo-Information, 2020, 9, 253.	1.4	13
9	Impact Assessment of Extreme Hydrometeorological Hazard Events on Road Networks. Journal of Infrastructure Systems, 2020, 26, 04020005.	1.0	3
10	Augmenting Printed School Atlases with Thematic 3D Maps. Multimodal Technologies and Interaction, 2020, 4, 23.	1.7	8
11	Cartographic reconstruction of building footprints from historical maps: A study on the Swiss Siegfried map. Transactions in GIS, 2020, 24, 442-461.	1.0	27
12	Place cookies and setting spiders in dream cartography. Transactions in GIS, 2020, 24, 944-966.	1.0	5
13	Spinning the wheel of design: evaluating geoportal Graphical User Interface adaptations in terms of human-centred design. International Journal of Cartography, 2019, 5, 23-43.	0.2	17
14	Smart Cartographic Background Symbolization for Map Mashups in Geoportals: A Proof of Concept by Example of Landuse Representation. Cartographic Journal, 2019, 56, 42-58.	0.8	5
15	Cartographic Visualization for Indoor Semantic Wayfinding. Multimodal Technologies and Interaction, 2019, 3, 22.	1.7	0
16	The Light Source Metaphor Revisited—Bringing an Old Concept for Teaching Map Projections to the Modern Web. ISPRS International Journal of Geo-Information, 2019, 8, 162.	1.4	2
17	Stress tests for a road network using fragility functions and functional capacity loss functions. Reliability Engineering and System Safety, 2018, 173, 78-93.	5.1	16
18	Automated Swiss-Style Relief Shading and Rock Hachuring. Cartographic Journal, 2018, 55, 341-361.	0.8	7

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19	Estimating network related risks: A methodology and an application in the transport sector. Natural Hazards and Earth System Sciences, 2018, 18, 2273-2293.	1.5	36
20	Storytelling in Interactive 3D Geographic Visualization Systems. ISPRS International Journal of Geo-Information, 2018, 7, 123.	1.4	26
21	Fictional volunteered geographic information in Dream Cartography. International Journal of Cartography, 2017, 3, 76-87.	0.2	4
22	GPU-Accelerated Rendering Methods to Visually Analyze Large-Scale Disaster Simulation Data. Journal of Geovisualization and Spatial Analysis, 2017, 1, 1.	2.1	27
23	Cloud-Based Architectures for Auto-Scalable Web Geoportals towards the Cloudification of the GeoVITe Swiss Academic Geoportal. ISPRS International Journal of Geo-Information, 2017, 6, 192.	1.4	12
24	Smart Cartographic Functionality for Improving Data Visualization in Map Mashups. Cartographica, 2017, 52, 194-211.	0.2	5
25	A Simulation and Visualization Environment for Spatiotemporal Disaster Risk Assessments of Network Infrastructures. Cartographica, 2017, 52, 349-363.	0.2	7
26	The wheel of design: assessing and refining the usability of geoportals. International Journal of Cartography, 2016, 2, 95-112.	0.2	4
27	A method to visualize the evolution of multiple interacting spatial systems. ISPRS Journal of Photogrammetry and Remote Sensing, 2016, 117, 217-226.	4.9	6
28	Atlas of Switzerland Goes Online and 3Dâ€"Concept, Architecture and Visualization Methods. Lecture Notes in Geoinformation and Cartography, 2016, , 171-184.	0.5	10
29	Toward Dream Cartography: Mapping Dream Space and Content. Cartographica, 2015, 50, 224-237.	0.2	9
30	Towards Better WMS Maps Through the Use of the Styled Layer Descriptor and Cartographic Conflict Resolution for Linear Features. Cartographic Journal, 2015, 52, 125-136.	0.8	4
31	Hypercube-Based Visualization Architecture for Web-Based Environmental Geospatial Information Systems. Cartographic Journal, 2015, 52, 137-148.	0.8	6
32	A GIS tool to increase the visual quality of relief shading by automatically changing the light direction. Computers and Geosciences, 2015, 74, 121-127.	2.0	22
33	Changing the Light Azimuth in Shaded Relief Representation by Clustering Aspect. Cartographic Journal, 2014, 51, 291-300.	0.8	12
34	Design Principles for Swiss-style Rock Drawing. Cartographic Journal, 2014, 51, 360-371.	0.8	7
35	Atlas Information Systems â€" Current Developments at ETH Zurich. KN - Journal of Cartography and Geographic Information, 2013, 63, 148-153.	1.6	1
36	An interactive, web-based, real-time hydrological map information system. Hydrological Sciences Journal, 2011, 56, 1-16.	1.2	14

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37	Visualization of uncertainty in natural hazards assessments using an interactive cartographic information system. Natural Hazards, 2011, 59, 1735-1751.	1.6	43
38	Mapping Literature: Visualisation of Spatial Uncertainty in Fiction. Cartographic Journal, 2011, 48, 293-308.	0.8	37
39	Graphical design of world map projections. International Journal of Geographical Information Science, 2010, 24, 1687-1702.	2.2	15
40	Point Pattern Synthesis. Cartographic Journal, 2010, 47, 257-261.	0.8	4
41	Interactive Design of 3D Maps with Progressive Projection. Cartographic Journal, 2010, 47, 211-221.	0.8	19
42	A WYSIWYG Interface for User-Friendly Access to Geospatial Data Collections. Lecture Notes in Geoinformation and Cartography, 2010, , 221-238.	0.5	5
43	Mapping Literature: Towards a Geography of Fiction. Lecture Notes in Geoinformation and Cartography, 2009, , 1-16.	0.5	43
44	Flex Projectorâ€"Interactive Software for Designing World Map Projections. Cartographic Perspectives, 2008, , 12-27.	0.1	22
45	Swiss-Style Colour Relief Shading Modulated by Elevationand by Exposure to Illumination. Cartographic Journal, 2006, 43, 198-207.	0.8	28
46	Digital Cliff Drawing for Topographic Maps: Traditional Representations by Means of New Technologies. Cartographica, 2001, 38, 55-65.	0.2	6
47	Cartographic Tools for Mapping Dreams. Proceedings of the ICA, 0, 2, 1-8.	0.0	1
48	3D Carto-Graphics â€" Principles, Methods and Examples for Interactive Atlases. Abstracts of the ICA, 0, 1, 1-1.	0.0	0
49	Web Cartography going public: Developing a Massive Open Online Course (MOOC) for cartographic prosumers. Abstracts of the ICA, 0, 1, 1-3.	0.0	0
50	Topic Selection and Structure in the National Atlas of Switzerland. Abstracts of the ICA, 0, 1, 1-2.	0.0	2
51	Kaleidoscope of Swiss Cartography. Abstracts of the ICA, 0, 1, 1-2.	0.0	0
52	Unlocking the Geospatial Past with Deep Learning â€" Establishing a Hub for Historical Map Data in Switzerland. Abstracts of the ICA, 0, 1, 1-2.	0.0	1
53	Towards Storytelling with Animated Pictorial Map Objects â€" An Experiment with Convolutional Neural Networks. Abstracts of the ICA, 0, 1, 1-2.	0.0	0
54	Extending Exploration and Navigation Capabilities of the Atlas of Switzerland. Abstracts of the ICA, 0, 1, 1-2.	0.0	0

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55	The Introduction Chapter of the Swiss World Atlas 2017 â€' An Innovative Cartographic Education Tool in Switzerland. Abstracts of the ICA, 0, 1, 1-2.	0.0	0
56	Swiss World Atlas in Class Room â€" How to teach with maps. Abstracts of the ICA, 0, 1, 1-1.	0.0	0
57	Analysis of Relief Shading Tools and Methods for Terrain Representation. Abstracts of the ICA, 0, 1, 1-1.	0.0	0
58	Augmenting Printed School Atlases with Thematic 3D Maps. Abstracts of the ICA, 0, 2, 1-1.	0.0	0
59	Cartographic Styles Used in Spatial Planning Maps to Visualise Uncertain, Unfinished and Imagined Content. Abstracts of the ICA, 0, 3, 1-2.	0.0	0
60	Inferring Implicit 3D Representations from Human Figures on Pictorial Maps. Abstracts of the ICA, 0, 3, 1-2.	0.0	0
61	Utilizing convolutional neural networks to extract road features from Swiss historical maps. Abstracts of the ICA, 0, 3, 1-2.	0.0	0
62	A survey on the evolution of the Chinese cadastral system. Proceedings of the ICA, 0, 4, 1-6.	0.0	0
63	A NOVEL DATA AUGMENTATION METHOD TO ENHANCE THE TRAINING DATASET FOR ROAD EXTRACTION FROM SWISS HISTORICAL MAPS. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, V-2-2022, 423-429.	0.0	4
64	CNN-BASED TEMPLATE MATCHING FOR DETECTING FEATURES FROM HISTORICAL MAPS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B2-2022, 1167-1173.	0.2	1
65	A CLOSER LOOK AT SEGMENTATION UNCERTAINTY OF SCANNED HISTORICAL MAPS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B4-2022, 189-194.	0.2	2