Jordan M Malof

List of Publications by Year
in descending order

30 papers	795 citations	1040056 9 h-index	1199594 12 g-index
30 all docs	30 docs citations	30 times ranked	746 citing authors

#	Article	IF	Citations
1	Deep learning for accelerated all-dielectric metasurface design. Optics Express, 2019, 27, 27523.	3.4	278
2	Automatic detection of solar photovoltaic arrays in high resolution aerial imagery. Applied Energy, 2016, 183, 229-240.	10.1	118
3	Distributed solar photovoltaic array location and extent dataset for remote sensing object identification. Scientific Data, 2016, 3, 160106.	5.3	73
4	Deep Learning the Electromagnetic Properties of Metamaterialsâ€"A Comprehensive Review. Advanced Functional Materials, 2021, 31, 2101748.	14.9	70
5	Neural-adjoint method for the inverse design of all-dielectric metasurfaces. Optics Express, 2021, 29, 7526.	3.4	43
6	A deep convolutional neural network, with pre-training, for solar photovoltaic array detection in aerial imagery. , 2017, , .		33
7	Some good practices for applying convolutional neural networks to buried threat detection in Ground Penetrating Radar. , 2017, , .		31
8	Inverse deep learning methods and benchmarks for artificial electromagnetic material design. Nanoscale, 2022, 14, 3958-3969.	5.6	21
9	The Synthinel-1 dataset: a collection of high resolution synthetic overhead imagery for building segmentation. , 2020, , .		20
10	A Large-Scale Multi-Institutional Evaluation of Advanced Discrimination Algorithms for Buried Threat Detection in Ground Penetrating Radar. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 6929-6945.	6.3	16
11	Learning the Physics of Allâ€Dielectric Metamaterials with Deep Lorentz Neural Networks. Advanced Optical Materials, 2022, 10, .	7.3	13
12	On Choosing Training and Testing Data for Supervised Algorithms in Ground-Penetrating Radar Data for Buried Threat Detection. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 497-507.	6.3	12
13	The poor generalization of deep convolutional networks to aerial imagery from new geographic locations: an empirical study with solar array detection. , 2017, , .		10
14	Estimating the electricity generation capacity of solar photovoltaic arrays using only color aerial imagery. , 2017, , .		8
15	Utilizing Geospatial Data for Assessing Energy Security: Mapping Small Solar Home Systems Using Unmanned Aerial Vehicles and Deep Learning. ISPRS International Journal of Geo-Information, 2022, 11, 222.	2.9	8
16	SIMPL: Generating Synthetic Overhead Imagery to Address Custom Zero-Shot and Few-Shot Detection Problems. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 4386-4396.	4.9	7
17	Improving the histogram of oriented gradient feature for threat detection in ground penetrating radar by implementing it as a trainable convolutional neural network. , 2018, , .		6
18	Deep Convolutional Segmentation of Remote Sensing Imagery: A Simple and Efficient Alternative to Stitching Output Labels. , 2018, , .		5

#	Article	IF	Citations
19	Training a single multi-class convolutional segmentation network using multiple datasets with heterogeneous labels: preliminary results. , 2019, , .		5
20	The poor generalization of deep convolutional networks to aerial imagery from new geographic locations: an empirical study with solar array detection. , 2017, , .		4
21	GridTracer: Automatic Mapping of Power Grids Using Deep Learning and Overhead Imagery. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 4956-4970.	4.9	4
22	A simple rotational equivariance loss for generic convolutional segmentation networks: preliminary results. , 2019, , .		3
23	Three-dimensional features, based on beamforming at multiple depths, improves landmine detection with a forward-looking ground-penetrating radar. , 2017, , .		2
24	A Probabilistic Model for Designing Multimodality Landmine Detection Systems to Improve Rates of Advance. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 5258-5270.	6.3	1
25	Trading spatial resolution for improved accuracy in remote sensing imagery: an empirical study using synthetic data. , 2017, , .		1
26	On The Extraction of Training Imagery from Very Large Remote Sensing Datasets for Deep Convolutional Segmenatation Networks. , 2018, , .		1
27	Automated Building Energy Consumption Estimation from Aerial Imagery. , 2018, , .		1
28	How much shape information is enough, or too much? Designing imaging descriptors for threat detection in ground penetrating radar data. , 2018, , .		1
29	Leveraging seed dictionaries to improve dictionary learning. , 2016, , .		0
30	The effect of translational variance in training and testing images on supervised buried threat detection algorithms for ground penetrating radar. , 2017, , .		0