Diego Cabello

List of Publications by Citations

73 papers	696 citations	14 h-index	24 g-index
97 ext. papers	831 ext. citations	3.7 avg, IF	3.32 L-index

#	Paper	IF	Citations
73	Computer-aided diagnosis: a neural-network-based approach to lung nodule detection. *IEEE Transactions on Medical Imaging*, **1998**, 17, 872-80	11.7	127
72	Algorithmic sequential decision-making in the frequency domain for life threatening ventricular arrhythmias and imitative artefacts: a diagnostic system. *Journal of Biomedical Engineering*, **1989**, 11, 320-8		118
71	A snake for CT image segmentation integrating region and edge information. *Image and Vision Computing*, **2001**, 19, 461-475	3.7	41
70	Cellular neural networks and active contours: a tool for image segmentation. *Image and Vision Computing*, **2003**, 21, 189-204	3.7	33
69	Computer-aided diagnoses: automatic detection of lung nodules. *Medical Physics*, **1998**, 25, 1998-2006	4.4	33
68	Discrete-time CNN for image segmentation by active contours. *Pattern Recognition Letters*, **1998**, 19, 721-734	4.7	25
67	Fuzzy K-nearest neighbor classifiers for ventricular arrhythmia detection. *International Journal of Bio-medical Computing*, **1991**, 27, 77-93		24
66	. *IEEE Transactions on Circuits and Systems Part 1: Regular Papers*, **2004**, 51, 997-1013		18
65	Distance measurement error in time-of-flight sensors due to shot noise. *Sensors*, **2015**, 15, 4624-42	3.8	16
64	A snake for model-based segmentation of biomedical images. *Pattern Recognition Letters*, **1997**, 18, 1529-1538	4.7	16
63	. *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, **2012**, 2, 723-736	5.2	15
62	Improved thermal analysis of buried landmines. *IEEE Transactions on Geoscience and Remote Sensing*, **2004**, 42, 1965-1975	8.1	15
61	Low-Power CMOS Vision Sensor for Gaussian Pyramid Extraction. *IEEE Journal of Solid-State Circuits*, **2017**, 52, 483-495	5.5	14
60	Micro-Energy Harvesting System Including a PMU and a Solar Cell on the Same Substrate With Cold Startup From 2.38 nW and Input Power Range up to 10 muW Using Continuous MPPT. *IEEE Transactions on Power Electronics*, **2019**, 34, 5105-5116	7.2	14
59	Wireless Sensor Network With Perpetual Motes for Terrestrial Snail Activity Monitoring. *IEEE Sensors Journal*, **2017**, 17, 5008-5015	4	13
58	Discriminant snakes for 3D reconstruction of anatomical organs. *Medical Image Analysis*, **2003**, 7, 293-310	15.4	12
57	Biomedical active segmentation guided by edge saliency. *Pattern Recognition Letters*, **2000**, 21, 559-572	4.7	12

56	Dynamic Model of Switched-Capacitor DC-DC Converters in the Slow-Switching Limit Including Charge Reusing. *IEEE Transactions on Power Electronics*, **2017**, 32, 5293-5311	7.2	11
55	**2011**,		8
54	A binary-based on-chip CNN solution for pixel-level snakes. *International Journal of Circuit Theory and Applications*, **2006**, 34, 383-407	2	8
53	Performance analysis of high-speed MOS transistors with different layout styles		8
52	On-Chip Solar Energy Harvester and PMU With Cold Start-Up and Regulated Output Voltage for Biomedical Applications. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2020**, 67, 1103-1114	3.9	7
51	Computer-aided lung nodule detection in chest radiography. *Lecture Notes in Computer Science*, **1995**, 331-338	0.9	7
50	Wireless sensor mote for snail pest detection **2014**,		6
49	Dynamic joint model of capacitive charge pumps and on-chip photovoltaic cells for CMOS micro-energy harvesting. *International Journal of Circuit Theory and Applications*, **2016**, 44, 1874-1894	2	5
48	Design and training of multilayer discrete time cellular neural networks for antipersonnel mine detection using genetic algorithms		5
47	Robustness oriented design tool for multilayer DTCNN applications. *International Journal of Circuit Theory and Applications*, **2002**, 30, 195-210	2	4
46	CNN-based 3D thermal modeling of the soil for antipersonnel mine detection		4
45	**1988**,		4
44	A 26.5 nJ/px 2.64 Mpx/s CMOS vision sensor for Gaussian pyramid extraction **2014**,		3
43	A 2D model for radiation-hard CMOS annular transistors. *Semiconductor Science and Technology*, **2009**, 24, 125009	1.8	3
42	Soft-Hard 3D FD-TD Solver for Non Destructive Evaluation **2007**,		3
41	Improved Analytical I-V model for polygonal-shape enclosed layout transistors **2007**,		3
40	On the Reduction of the Number of Coefficient Circuits in a DTCNN Cell **2006**,		3
39	A one-quadrant discrete-time cellular neural network CMOS chip for pixel-level snakes		3

38	A one-quadrant discrete-time cellular neural network architecture for pixel-level snakes: B/W processing		3
37	Automatic segmentation of lung fields on chest radiographic images. *Journal of Biomedical Informatics*, **1999**, 32, 283-303		3
36	Four-transistor pinned photodiodes in standard CMOS technologies for time-of-flight sensors. *Semiconductor Science and Technology*, **2015**, 30, 045002	1.8	2
35	Capacitance-based wireless sensor mote for snail pest detection **2015**,		2
34	In-pixel analog memories for a pixel-based background subtraction algorithm on CMOS vision sensors. *International Journal of Circuit Theory and Applications*, **2018**, 46, 1631	2	2
33	The dickson charge pump as voltage booster for light energy harvesting on CMOS vision chips **2014** ,		2
32	Simplification and hardware implementation of the feature descriptor vector calculation in the SIFT algorithm **2014**,		2
31	Dark current in standard CMOS pinned photodiodes for Time-of-Flight sensors **2014**,		2
30	A dc I‑V model for short-channel polygonal enclosed-layout transistors. *International Journal of Circuit Theory and Applications*, **2009**, 37, 163-177	2	2
29	FPGA-based hardware accelerator of the heat equation with applications on infrared thermography **2008**,		2
28	Template-oriented hardware design based on shape analysis of 2D CNN operators in CNN template libraries and applications **2008**,		2
27	Bottom collection of photodiode-based CMOS APS **2008**,		2
26	Area and Time Efficient Cellular Non-linear Networks **2007**,		2
25	FPGA Implementation of 3-D Thermal Model Simulator **2006**,		2
24	The Markov random fields in functional neighbors as a texture model: applications in texture classification **1996**,		2
23	ON KNOWLEDGE-BASED MEDICAL IMAGE UNDERSTANDING. *Cybernetics and Systems*, **1990**, 21, 277-289	1.9	2
22	Design for maximum power transfer efficiency of thermoelectric generators using mixed mode simulations **2016**,		1
21	Image Feature Extraction Acceleration. *Studies in Computational Intelligence*, **2016**, 109-132	0.8	1

20	Ultralow power voltage reference circuit for implantable devices in standard CMOS technology. *International Journal of Circuit Theory and Applications*, **2019**, 47, 991-1005	2	1
19	Gaussian pyramid extraction with a CMOS vision sensor **2014**,		1
18	Effect of temporal and spatial noise on the performance of hardware oriented background extraction algorithms **2017**,		1
17	A study of CMOS radiation tolerant transistors using green functions **2009**,		1
16	Efficient software–hardware 3D heat equation solver with applications on the non-destructive evaluation of minefields. *Computers and Geosciences*, **2009**, 35, 2239-2249	4.5	1
15	Analytical model of short-channel gate enclosed transistors using Green functions. *Solid-State Electronics*, **2009**, 53, 514-519	1.7	1
14	A Markov random field model for bony tissue classification. *Computerized Medical Imaging and Graphics*, **1998**, 22, 169-78	7.6	1
13	DT-CNN emulator: 3D heat equation solver with applications on the non-destructive soil inspection **2008**,		1
12	Verification of Split&Shift techniques for CNN hardware reduction **2007**,		1
11	CNN Implementation of Spin Filters for Electronic Speckle Pattern Interferometry Applications **2007**,		1
10	Antipersonnel mine detection on infrared images		1
9	Genetic algorithm based training for multilayer discrete-time cellular neural networks. *Lecture Notes in Computer Science*, **1999**, 467-476	0.9	1
8	A computational frame to study social behaviour in animals. *International Journal of Bio-medical Computing*, **1986**, 19, 201-18		1
7	Live demonstration: Wireless sensor network for snail pest detection **2016**,		1
6	An 11 mA Capacitor-Less LDO with 3.08 nA Quiescent Current and SSF-Based Adaptive Biasing. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2021**, 1-1	3.5	0
5	Split and shift methodology on cellular processor arrays: area saving versus time penalty. *International Journal of Circuit Theory and Applications*, **2014**, 42, 258-295	2	
4	Non-destructive soil inspection using an efficient 3D software–hardware heat equation solver. *Inverse Problems in Science and Engineering*, **2009**, 17, 755-775	1.3	
3	FPGA computation of the 3D heat equation. *Computational Geosciences*, **2010**, 14, 649-664	2.7	

2   Corrections to Wireless Sensor Network With Perpetual Motes for Terrestrial Snail Activity Monitoring *IEEE Sensors Journal*, **2019**, 19, 6553-6553   4

1   Pulsed time-of-flight pixel with on-chip 20 klux background light suppression in standard CMOS technology. *International Journal of Circuit Theory and Applications*, **2018**, 46, 987-1005   2