Antonio Torralba

List of Publications by Year
in descending order

149 papers	19,729 citations

147801

31 h-index	107 g-index

26613

150 all docs	150 docs citations

150 times ranked	14677 citing authors

#	Article	IF	Citations
1	Learning Deep Features for Discriminative Localization. , 2016, , .		5,267
2	LabelMe: A Database and Web-Based Tool for Image Annotation. International Journal of Computer Vision, 2008, 77, 157-173.	15.6	2,723
3	80 Million Tiny Images: A Large Data Set for Nonparametric Object and Scene Recognition. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2008, 30, 1958-1970.	13.9	1,376
4	Learning to predict where humans look. , 2009, , .		1,368
5	Contextual guidance of eye movements and attention in real-world scenes: The role of global features in object search.. Psychological Review, 2006, 113, 766-786.	3.8	1,352
6	Learning the signatures of the human grasp using a scalable tactile glove. Nature, 2019, 569, 698-702.	27.8	697
7	Semantic Understanding of Scenes Through the ADE20K Dataset. International Journal of Computer Vision, 2019, 127, 302-321.	15.6	649
8	Contextual Priming for Object Detection. International Journal of Computer Vision, 2003, 53, 169-191.	15.6	610
9	Statistics of natural image categories. Network: Computation in Neural Systems, 2003, 14, 391-412.	3.6	538
10	The flipped voltage follower: a useful cell for low-voltage low-power circuit design. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2005, 52, 1276-1291.	0.1	532
11	Comparison of deep neural networks to spatio-temporal cortical dynamics of human visual object recognition reveals hierarchical correspondence. Scientific Reports, 2016, 6, 27755.	3.3	510
12	SIFT Flow: Dense Correspondence across Different Scenes. Lecture Notes in Computer Science, 2008, , 28-42.	1.3	311
13	Statistics of natural image categories. Network: Computation in Neural Systems, 2003, 14, 391-412.	3.6	261
14	LabelMe: Online Image Annotation and Applications. Proceedings of the IEEE, 2010, 98, 1467-1484.	21.3	213
15	Modeling global scene factors in attention. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2003, 20, 1407.	1.5	202
16	Understanding the role of individual units in a deep neural network. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30071-30078.	7.1	176
17	Learning human–environment interactions using conformal tactile textiles. Nature Electronics, 2021, 4, 193-201.	26.0	172
18	Nonparametric scene parsing: Label transfer via dense scene alignment. , 2009, , .		166

#	Article	IF	Citations
19	Intrinsic and extrinsic effects on image memorability. Vision Research, 2015, 116, 165-178.	1.4	164
20	Parsing IKEA Objects: Fine Pose Estimation. , 2013, , .		163
21	Statistics of natural image categories. Network: Computation in Neural Systems, 2003, 14, 391-412.	3.6	157
22	Low Supply Voltage High-Performance CMOS Current Mirror With Low Input and Output Voltage Requirements. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2004, 51, 124-129.	2.2	105
23	Speed control of induction motors using a novel fuzzy sliding-mode structure. IEEE Transactions on Fuzzy Systems, 2002, 10, 375-383.	9.8	102
24	How many pixels make an image?. Visual Neuroscience, 2009, 26, 123-131.	1.0	99
25	A continuous-time /spl Sigma//spl Delta/ ADC with increased immunity to interferers. IEEE Journal of Solid-State Circuits, 2004, 39, 2170-2178.	5.4	87
26	A new family of very low-voltage analog circuits based on quasi-floating-gate transistors. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2003, 50, 214-220.	2.2	77
27	Modifying the Memorability of Face Photographs. , 2013, , .		76
28	Selective Protection Analysis Using a SEU Emulator: Testing Protocol and Case Study Over the Leon2 Processor. IEEE Transactions on Nuclear Science, 2007, 54, 951-956.	2.0	73
29	A low-power low-voltage OTA-C sinusoidal oscillator with a large tuning range. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2005, 52, 283-291.	0.1	71
30	FASY: a fuzzy-logic based tool for analog synthesis. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 1996, 15, 705-715.	2.7	65
31	Low-voltage CMOS op-amp with rail-to-rail input and output signal swing for continuous-time signal processing using multiple-input floating-gate transistors. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2001, 48, 111-116.	2.2	65
32	Building a database of 3D scenes from user annotations. , 2009, , .		59
33	Evaluation of image features using a photorealistic virtual world. , 2011, , .		51
34	Simple class-AB voltage follower with slew rate and bandwidth enhancement and no extra static power or supply requirements. Electronics Letters, 2006, 42, 784.	1.0	50
35	Exploiting Occlusion in Non-Line-of-Sight Active Imaging. IEEE Transactions on Computational Imaging, 2018, 4, 419-431.	4.4	50
36	Comparison of conventional and new flipped voltage structures with increased input/output signal swing and current sourcing/sinking capabilities. , 2005, , .		47

#	Article	IF	Citations
37	Floating-gate-based tunable CMOS low-voltage linear transconductor and its application to HF g/sub m/-C filter design. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2001, 48, 106-110.	2.2	40
38	ASIC implementation of a digital tachometer with high precision in a wide speed range. IEEE Transactions on Industrial Electronics, 1996, 43, 655-660.	7.9	39
39	Output stage for low supply voltage, high-performance CMOS current mirrors. Electronics Letters, 2002, 38, 1528.	1.0	38
40	Low-voltage CMOS operational amplifiers with wide input-output swing based on a novel scheme. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2000, 47, 772-774.	0.1	35
41	Multirate ΣΔ modulators. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2002, 49, 170-176.	2.2	34
42	Simple technique for opamp continuous-time 1 V supply operation. Electronics Letters, 1999, 35, 263.	1.0	31
43	Class AB output stage for low voltage CMOS op-amps with accurate quiescent current control. Electronics Letters, 2000, 36, 1753.	1.0	31
44	Tunable Linear MOS Resistors Using Quasi-Floating-Gate Techniques. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 41-45.	3.0	30
45	Continuous-Time Sigma–Delta Modulator With an Embedded Pulsewidth Modulation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 775-785.	5.4	27
46	Accidental Pinhole and Pinspeck Cameras. International Journal of Computer Vision, 2014, 110, 92-112.	15.6	27
47	New Continuous-Time Multibit Sigma–Delta Modulators With Low Sensitivity to Clock Jitter. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 74-83.	5.4	24
48	Accidental pinhole and pinspeck cameras: Revealing the scene outside the picture. , 2012, , .		22
49	Compact low power high slew rate CMOS buffer for large capacitive loads. Electronics Letters, 2002, 38, 1348.	1.0	21
50	Rail-to-rail low-power high-slew-rate CMOS analogue buffer. Electronics Letters, 2004, 40, 843.	1.0	21
51	A communication system from EV to EV Service Provider based on OCPP over a wireless network. , 2013, , .		19
52	Two digital circuits for a fully parallel stochastic neural network. IEEE Transactions on Neural Networks, 1995, 6, 1264-1268.	4.2	18
53	A Tunable Pseudo-Differential OTA With $-78~{hbox {dB}}$ THD Consuming 1.25 mW. IEEE Transactions on Circuits and Systems II: Express Briefs, 2008, 55, 527-531.	3.0	18
54	Time domain analysis of partial discharges envelope in medium voltage XLPE cables. Electric Power Systems Research, 2015, 125, 220-227.	3.6	18

#	Article	IF	Citations
55	Digital Noise-Shaping of Residues in Dual-Quantization Sigmaâ€"Delta Modulators. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2004, 51, 225-232.	0.1	17
56	Microprocessor and FPGA interfaces for in-system co-debugging in field programmable hybrid systems. Microprocessors and Microsystems, 2005, 29, 75-85.	2.8	16
57	Circuit performance modeling by means of fuzzy logic. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 1996, 15, 1391-1398.	2.7	15
58	Radiation Environment Emulation for VLSI Designs: A Low Cost Platform based on Xilinx FPGA's. , 2007, , .		15
59	Data Acquisition System Based on Subsampling for Testing Wideband Multistandard Receivers. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 3234-3237.	4.7	14
60	ITERL: A Wireless Adaptive System for Efficient Road Lighting. Sensors, 2019, 19, 5101.	3.8	14
61	Modeling and Analysis of Dynamic Behaviors of Web Image Collections. Lecture Notes in Computer Science, 2010, , 85-98.	1.3	14
62	Analogue switch for very low-voltage applications. Electronics Letters, 2003, 39, 701.	1.0	13
63	Modeling Airfield Ground Lighting Systems for Narrowband Power-Line Communications. IEEE Transactions on Power Delivery, 2010, 25, 2399-2405.	4.3	13
64	Frequency-to-digital conversion based on a sampled Phase-Locked Loop. Microelectronics Journal, 2013, 44, 880-887.	2.0	13
65	New Compact CMOS Continuous-Time Low-Voltage Analog Rank-Order Filter Architecture. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2004, 51, 257-261.	2.2	12
66	Model of a Device-Level Combined Wireless Network Based on NB-IoT and IEEE 802.15.4 Standards for Low-Power Applications in a Diverse IoT Framework. Sensors, 2021, 21, 3718.	3.8	12
67	Very low-voltage class AB CMOS and bipolar precision current rectifiers. Electronics Letters, 1999, 35, 1904.	1.0	11
68	Low-power low-voltage differential class-AB OTAs for SC circuits. Electronics Letters, 2002, 38, 1304.	1.0	11
69	Low-voltage transconductor with high linearity and large bandwidth. Electronics Letters, 2002, 38, 1616.	1.0	11
70	Low Voltage Class AB Output Stage for CMOS Op-Amps Using Multiple Input Floating Gate Transistors. Analog Integrated Circuits and Signal Processing, 2003, 36, 245-249.	1.4	11
71	Fuzzy-logic-based analog design tools. IEEE Micro, 1996, 16, 60-68.	1.8	10
72	New class of multibit sigma-delta modulators using multirate architecture. Electronics Letters, 2000, 36, 783.	1.0	10

#	Article	IF	Citations
73	Multirate single-bit ΣΔ modulators. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2002, 49, 629-634.	2.2	10
74	Design of an efficient CORDIC-based architecture for synchronization in OFDM. IEEE Transactions on Consumer Electronics, 2006, 52, 774-782.	3.6	10
75	Internally compensated LDO regulator based on the cascoded FVF. Microelectronics Journal, 2014, 45, 1268-1274.	2.0	10
76	Bandwidth-Enhanced High Current Efficiency Class-AB Buffer With Very Low Output Resistance. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1544-1548.	3.0	10
77	A fuzzy-logic controller with on-chip learning, employing stochastic logic. , 0, , .		9
78	Compact low-voltage class-AB analogue buffer. Electronics Letters, 2006, 42, 152.	1.0	9
79	Data Acquisition System based on Subsampling Using Multiple Clocking Techniques. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 2333-2335.	4.7	9
80	Analysis, Comparison, and Experimental Validation of a Class AB Voltage Follower With Enhanced Bandwidth and Slew Rate. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 1353-1364.	3.1	9
81	Design of a fuzzy controller mixing analog and digital techniques. , 0, , .		8
82	A PWM fuzzy logic controller. IEEE Micro, 1996, 16, 68-71.	1.8	8
83	An adaptive speed estimator for induction motors based on a Kalman filter with low sample time. , 0, , .		8
84	Title is missing!. Analog Integrated Circuits and Signal Processing, 2003, 36, 69-77.	1.4	8
85	Low-Power Low-Voltage Class-AB Linear OTA for HF Filters with a Large Tuning Range. Analog Integrated Circuits and Signal Processing, 2003, 37, 275-280.	1.4	8
86	Low-power baseband filter for zero-intermediate frequency digital video broadcasting terrestrial/handheld receivers. IET Circuits, Devices and Systems, 2009, 3, 291-301.	1.4	8
87	Enhanced source-degenerated CMOS differential transconductor. Microelectronics Journal, 2011, 42, 396-402.	2.0	8
88	Smart Railway Operation Aid System for Facilities With Low-Safety Requirements. IEEE Intelligent Transportation Systems Magazine, 2021, 13, 253-267.	3.8	8
89	Low-voltage high-gain differential OTA for SC circuits. Electronics Letters, 2003, 39, 1159.	1.0	7
90	Comparison of programmable linear resistors based on quasi-floating gate MOSFETs. , 2008, , .		7

#	ARTICLE	IF	CITATIONS
91	Spectral Analysis of Pulsewidth-Modulated Sampled Signals. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 622-626.	3.0	7
92	Continuous-Time Sigmaâ€"Delta Modulator With a Fast Tracking Quantizer and Reduced Number of Comparators. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 2413-2425.	5.4	7
93	Highly linear voltage follower based on local feedback and cascode transistor with dynamic biasing. Electronics Letters, 2011, 47, 244.	1.0	7
94	Automated meter reading based on IEEE 802.15.4. , 2012, , .		7
95	A 2 mW 89 dB DR continuous-time Î£Î" ADC with increased immunity to wide-band interferers. , 0, , .		6
96	Multi-carrier Receiver for Broadband Power Line Communications. IEEE Transactions on Consumer Electronics, 2007, 53, 1293-1301.	3.6	6
97	Frequency-to-digital conversion based on sampled phase-locked loop with third-order noise shaping. Electronics Letters, 2011, 47, 1069.	1.0	6
98	An Autonomous, Intelligent Sign Control System Using Wireless Communication and LED Signs for Rural and Suburban Roads. IEEE Intelligent Transportation Systems Magazine, 2022, 14, 115-128.	3.8	6
99	Towards a fully parallel stochastic opfield neural network. , 0, , .		5
100	New Multirate Bandpass Sigma-Delta Modulators. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2004, 51, 2141-2147.	0.1	5
101	Class-AB Rail-to-Rail CMOS Analog Buffer. , 0, , .		5
102	A Very Linear OTA with V-I Conversion based on Quasi-Floating MOS Resistor. , 2007, , .		5
103	An Analog Squaring Technique Based on Asynchronous Sigmaâ€"Delta Modulation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 629-633.	3.0	5
104	AFAN: tool for optimizing fuzzy controllers. IEEE Micro, 1997, 17, 50-54.	1.8	4
105	Method for frequency offset estimation in OFDM with application to power line communication. Electronics Letters, 2003, 39, 468.	1.0	4
106	Robust dual-quantisation multibit Sigma-Delta modulator. Electronics Letters, 2003, 39, 702.	1.0	4
107	1.1 V Low-Power ?? Modulator for 14-bit, 16 KHz A/D Conversion Using a New Low-Voltage Class-AB Op-amp. Analog Integrated Circuits and Signal Processing, 2005, 43, 31-38.	1.4	4
108	Time-Interleaved Multirate Sigma–Delta Modulators. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2006, 53, 1026-1030.	2.2	4

#	Article	IF	Citations
109	A âˆ’72 dB @ 2 MHz IM3 CMOS tunable pseudo-differential transconductor. , 2008, , .		4
110	Using broadband power line communications in non-conventional applications. IEEE Transactions on Consumer Electronics, 2011, 57, 1092-1098.	3.6	4
111	On the design of wireless sensor networks for autonomous heliostats in Solar Tower Power Plants. , 2012, , .		4
112	Wireless Structural Health Monitoring system based on Autoregressive models. , 2012, , .		4
113	A novel autozeroing technique for flash Analog-to-Digital converters. The Integration VLSI Journal, 2014, 47, 23-29.	2.1	4
114	Guest Editorial: Big Data. International Journal of Computer Vision, 2016, 119, 1-2.	15.6	4
115	Effects of Dispersion and Multi-Path Propagation in Partial Discharges Location. IEEE Access, 2020, 8, 219062-219070.	4.2	4
116	Making use of CORDICs and distributed arithmetic to produce a field-programmable fuzzy logic controller in an FPGA. , 0, , .		3
117	Low-Voltage Analog Circuits Based on Wideband Capacitive Coupling. Analog Integrated Circuits and Signal Processing, 2003, 37, 253-257.	1.4	3
118	Improving the design process of VLSI circuits by means of a hardware debugging system: UNSHADES-1 framework. , 0, , .		2
119	A new method for simultaneous fine time synchronization and frequency offset estimation in OFDM with simple hardware. , 0, , .		2
120	A true low voltage class-AB current mirror. IEICE Electronics Express, 2005, 2, 103-107.	0.8	2
121	1.33â€‰mW, 2â€‰V CMOS continuous-time bandpass filter with two decades of centre frequency tuning range and high Q. IET Circuits, Devices and Systems, 2005, 152, 456.	0.6	2
122	Time-Interleaved Multirate Sigma-Delta Modulators. , 0, , .		2
123	Optimum Doppler compensation scheme for DVB-H receivers. Electronics Letters, 2006, 42, 767.	1.0	2
124	Compact low-power implementation for continuous-time Î£Î" modulators. The Integration VLSI Journal, 2013, 46, 441-448.	2.1	2
125	Compact SC frequency tuning circuit for continuous-time Gmâ€"C filters. Analog Integrated Circuits and Signal Processing, 2013, 74, 473-478.	1.4	2
126	LDO compensation with variable Miller series resistance. Electronics Letters, 2014, 50, 159-161.	1.0	2

#	Article	IF	Citations
127	Low Voltage Power Efficient Tunable Shaper Circuit With Rail-To-Rail Output Range for the HYDE Detector at FAIR. IEEE Transactions on Nuclear Science, 2014, 61, 844-851.	2.0	2
128	Nonparametric scene parsing: Label transfer via dense scene alignment. , 2009, , .		2
129	A systolic array with applications to image processing and wire-routing in VLSI circuits. Parallel Computing, 1991, 17, 85-93.	2.1	1
130	Fuzzy logic control via an FPGA: a design using techniques from digital signal processing. , 2004, , .		1
131	Electronic Implementation of Multirate Sigma-Delta Modulators Using CMOS Technologies. Analog Integrated Circuits and Signal Processing, 2006, 47, 125-135.	1.4	1
132	Frequency offset estimation in WIMAX receivers. IEEE Transactions on Consumer Electronics, 2009, 55, 1065-1069.	3.6	1
133	Impact of finite impulse response digital-to-analogue converter delay on the stability of continuous-time sigma-delta modulators with pulse-with modulation in the feedback path. IET Circuits, Devices and Systems, 2010, 4, 218.	1.4	1
134	Pulse-width modulation in sigma-delta modulators. , 2010, , .		1
135	Linearity Enhancement of VCO-Based Quantizers for SD Modulators by Means of a Tracking Loop. IEEE Transactions on Circuits and Systems II: Express Briefs, 2014, 61, 383-387.	3.0	1
136	Timeâ€interleaving design of errorâ€feedback sigmaâ€delta modulators with infinite impulse response noise transfer function. IET Circuits, Devices and Systems, 2021, 15, 448-454.	1.4	1
137	Correction of errors and harmonic distortion in pulse-width modulation of digital signals. AEU - International Journal of Electronics and Communications, 2021, 142, 153991.	2.9	1
138	Low voltage continuous time tunable high frequency filters based on floating gates and dynamic biasing techniques. , 0, , .		0
139	Programmable SC Biquad Using One Single Capacitor Bank. Analog Integrated Circuits and Signal Processing, 2005, 42, 129-137.	1.4	0
140	Low-Voltage CMOS Single Ended and Fully Differential Amplifier with Programmable Gain.. , 2007, , .		0
141	Optimization of CORDIC cells in the backward circular rotation mode. AEU - International Journal of Electronics and Communications, 2007, 61, 337-340.	2.9	0
142	Multibit CT SD modulators with pulse width modulation and FIR-DAC in the feedback path. , 2008, , .		0
143	A multirate Sigma Delta modulator for GSM standard in CMOS technology. , 2009, , .		0
144	A new capacitor-ratio and offset independent residue amplifier. Analog Integrated Circuits and Signal Processing, 2011, 67, 223-230.	1.4	0

#	ARTICLE	IF	CITATIONS
145	A monitoring system for identification and validation of the energetic model of a building using Wireless Sensor Networks. , 2012, , .		0
146	A Service Oriented Wireless Platform for Acquisition and Control (SOWPAC). , 2013, , .		0
147	Mixed synchronous-asynchronous solution for cellular WSNs coordinator. , 2016, , .		0
148	Multirate Sigma-Delta Modulators, an alternative to Multibit. , 2002, , 161-180.		0
149	Towards cognitive saliency: narrowing the gap to human performance. Journal of Vision, 2017, 17, 542.	0.3	0