A random access photodiode array for intelligent image

IEEE Transactions on Electron Devices 38, 1772-1780

DOI: 10.1109/16.119013

Citation Report

#	Article	IF	CITATIONS
1	Neural-based smart CMOS sensors for on-line pattern classification applications. , 0, , .		2
2	CMOS APS imager employing 3.3 V 12 bit 6.3 MS/s pipelined ADC. , 0, , .		4
3	Thin Film on Asic - A Novel Concept for Intelligent Image Sensors. Materials Research Society Symposia Proceedings, 1992, 258, 1139.	0.1	20
4	An Addressable 256 $ ilde{A}$ — 256 Photodiode Image Sensor Array with an 8-bit Digital Output. , 1992, , .		13
5	An addressable 256�256 photodiode image sensor array with an 8-bit digital output. Analog Integrated Circuits and Signal Processing, 1993, 4, 37-49.	1.4	33
6	A $128 ilde{ ext{A}}$ -128 CMOS active pixel image sensor for highly integrated imaging systems. , 0, , .		51
7	A novel photo BJT array for intelligent imaging. , 0, , .		6
8	<title>Active pixel sensors: are CCDs dinosaurs?</title> ., 1993,,.		266
9	CMOS active pixel image sensor. IEEE Transactions on Electron Devices, 1994, 41, 452-453.	3.0	146
10	CMOS photodetectors for industrial position sensing. IEEE Transactions on Instrumentation and Measurement, 1994, 43, 489-492.	4.7	27
11			

#	Article	IF	Citations
19	<title>Wide-dynamic-range APS star tracker</title> ., 1996, 2654, 82.		9
20	Characterization of CMOS IC photodiodes using focused laser sources. , 0, , .		0
21	<title>Photodiodes for high-frequency applications implemented in CMOS and BiCMOS processes</title> ., 1997, 3100, 119.		4
22	Locally adaptive active pixel sensors., 0, , .		3
23	Image Capture Circuits in CMOS. , 0, , .		1
24	Current-mediated, current-reset 768 $ ilde{A}$ —512 active pixel sensor array. , 0, , .		15
25	CMOS image sensors-recent advances and device scaling considerations. , 0, , .		31
26	CMOS active pixel sensor star tracker with regional electronic shutter. IEEE Journal of Solid-State Circuits, 1997, 32, 285-288.	5.4	58
27	Histogram-equalization-based adaptive image sensor for real-time vision. IEEE Journal of Solid-State Circuits, 1997, 32, 1027-1036.	5.4	24
28	CMOS image sensors: electronic camera-on-a-chip. IEEE Transactions on Electron Devices, 1997, 44, 1689-1698.	3.0	989
29	Design and analysis of a 512×768 current-mediated active pixel array image sensor. IEEE Transactions on Electron Devices, 1997, 44, 1706-1715.	3.0	23
30	A snap-shot CMOS active pixel imager for low-noise, high-speed imaging. , 0, , .		12
31	A 200-mW, 3.3-V, CMOS color camera IC producing 352×288 24-b video at 30 frames/s. IEEE Journal of Solid-State Circuits, 1998, 33, 2092-2103.	5.4	51
33	A robust hybrid neural architecture for an industrial sensor application. , 0, , .		6
34	Spatially variant flexible sampling control integrated on an image sensor. , 0, , .		0
35	A novel image sensor with flexible sampling control. , 0, , .		2
36	Wide-dynamic-range sensors. Optical Engineering, 1999, 38, 1650.	1.0	72
37	Colorimetric characterization of novel multiple-channel sensors for imaging and metrology. Journal of Electronic Imaging, 1999, 8, 342.	0.9	25

#	Article	IF	Citations
38	A Locally Adaptive Multimode Photodetector Circuit. Analog Integrated Circuits and Signal Processing, 1999, 18, 255-275.	1.4	1
39	A single-chip CMOS APS camera with direct frame difference output. IEEE Journal of Solid-State Circuits, 1999, 34, 1415-1418.	5.4	60
40	<title>Pixel-level processing: why, what, and how?</title> ., 1999,,.		61
41	A versatile photodiode SPICE model for optical microsystem simulation. Microelectronics Journal, 2000, 31, 277-282.	2.0	13
42	Sensitivity of CMOS based imagers and scaling perspectives. IEEE Transactions on Electron Devices, 2000, 47, 2110-2122.	3.0	146
43	High-resolution focal plane image processing. , 2001, 4369, 610.		0
44	High-sensitivity high-dynamic digital CMOS imager. , 2001, , .		5
45	Title is missing!. Analog Integrated Circuits and Signal Processing, 2001, 27, 237-246.	1.4	O
46	Programmable spatial processing imager chip. Electronics Letters, 2001, 37, 688.	1.0	0
47	Nonsilicide source/drain pixel for 0.25-/spl mu/m CMOS image sensor. IEEE Electron Device Letters, 2001, 22, 71-73.	3.9	12
48	Implementation of steerable spatiotemporal image filters on the focal plane. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2002, 49, 233-244.	2.2	63
49	New pixel-shared design and split-path readout of CMOS image sensor circuits. , 0, , .		0
50	A matrix transform imager allowing high-fill factor. , 0, , .		8
51	A matrix transform imager and architecture. , 0, , .		3
52	Empirical dark current modeling for complementary metal oxide semiconductor active pixel sensor. Optical Engineering, 2002, 41, 1216.	1.0	22
53	Low-power analog image processing using transform imagers. , 0, , .		2
54	<title>Active-area shape influence on the dark current of CMOS imagers</title> ., 2002,,.		2
55	A 128×128 CMOS image sensor with analog memory for synchronous image capture. IEEE Sensors Journal, 2002, 2, 120-127.	4.7	16

#	Article	IF	CITATIONS
56	Photoresponse analysis and pixel shape optimization for CMOS active pixel sensors. IEEE Transactions on Electron Devices, 2003, 50, 12-18.	3.0	50
57	CMOS image sensor with NMOS-only global shutter and enhanced responsivity. IEEE Transactions on Electron Devices, 2003, 50, 57-62.	3.0	27
58	CMOS imaging for automotive applications. IEEE Transactions on Electron Devices, 2003, 50, 173-183.	3.0	37
59	CMOS APS crosstalk characterization via a unique submicron scanning system. IEEE Transactions on Electron Devices, 2003, 50, 1994-1997.	3.0	18
60	Monolithic active pixel sensors (MAPS) in a VLSI CMOS technology. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 501, 251-259.	1.6	26
61	Advances in elevated diode technologies for integrated circuits: progress towards monolithic instruments. IET Circuits, Devices and Systems, 2003, 150, 235.	0.6	8
62	Unique sub-micron scanning system use for CMOS APS crosstalk characterization. , 2003, 5017, 136.		12
63	Design and optimization of 0.25/spl mu/m technology low-voltage low-power CMOS APS with device scaling considerations. , 2003, , .		O
64	A Vision Chip for Color Segmentation and Pattern Matching. Eurasip Journal on Advances in Signal Processing, 2003, 2003, 1.	1.7	17
65	High Fill-Factor Imagers for Neuromorphic Processing Enabled by Floating-Gate Circuits. Eurasip Journal on Advances in Signal Processing, 2003, 2003, 1.	1.7	7
66	Photoresponse Analysis and Pixel Shape Optimization for CMOS APS., 2004,, 75-98.		0
67	Focal-Plane Analog Image Processing. , 2004, , 141-202.		1
69	Morton (Z) scan based real-time variable resolution CMOS image sensor. , 0, , .		O
70	A 1/3" VGA linear wide dynamic range CMOS image sensor implementing a predictive multiple sampling algorithm with overlapping integration intervals. IEEE Journal of Solid-State Circuits, 2004, 39, 1487-1496.	5.4	60
71	ColorCam: a color-based object recognition camera (Invited Paper)., 2005,,.		O
72	A Wide Dynamic Range CMOS Active Pixel Sensor with Frame Difference. , 0, , .		3
73	A CMOS floating-gate matrix transform imager. IEEE Sensors Journal, 2005, 5, 455-462.	4.7	9
74	Morton (Z) scan based real-time variable resolution CMOS image sensor. IEEE Transactions on Circuits and Systems for Video Technology, 2005, 15, 947-952.	8.3	25

#	Article	IF	Citations
75	CMOS Monolithic Active Pixel Sensors (MAPS): New â€ ⁻ eyesâ€ ^{-™} for science. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 560, 139-142.	1.6	18
76	HDR CMOS imagers and their applications. , 2006, , .		13
77	CMOS image sensors: State-Of-the-art and future perspectives. , 2007, , .		6
78	Infrared detection with silicon nano-field-effect transistors. Applied Physics Letters, 2007, 90, 223108.	3.3	17
79	Reduced Human Perception of FPN Noise of the Pyramidal Readout CMOS Image Sensor. IEEE Transactions on Circuits and Systems for Video Technology, 2007, 17, 924-930.	8.3	6
80	CMOS image sensors: State-of-the-art and future perspectives. Solid-State Circuits Conference, 2008 ESSCIRC 2008 34th European, 2007, , .	0.0	33
81	Foveated Dynamic Range of the Pyramidal CMOS Image Sensors. IEEE Transactions on Electron Devices, 2007, 54, 3422-3425.	3.0	9
82	CMOS image sensors: State-of-the-art. Solid-State Electronics, 2008, 52, 1401-1406.	1.4	139
83	Integration time optimization for integrating photosensors. , 2008, , .		2
84	Light detecting devices: their use for colour measurement and image capture. Review of Progress in Coloration and Related Topics, 2004, 34, 72-85.	0.2	3
85	More than Moore. , 2009, , .		26
86	Wide-Dynamic-Range CMOS Image Sensors—Comparative Performance Analysis. IEEE Transactions on Electron Devices, 2009, 56, 2446-2461.	3.0	101
87	Which Photodiode to Use: A Comparison of CMOS-Compatible Structures. IEEE Sensors Journal, 2009, 9, 752-760.	4.7	59
88	Towards design of a bridge to enable high speed image sensors for random access. , 2010, , .		0
89	Better Pictures Through Physics. IEEE Solid-State Circuits Magazine, 2010, 2, 22-28.	0.4	25
90	Design of a bridge to randomly access high speed image sensor pixels in embedded systems. , 2010, , .		0
91	Design of a DVP compatible bridge to randomly access pixels of high speed image sensors. , 2011, , .		2
92	Single-Photon Imaging. Springer Series in Optical Sciences, 2011, , .	0.7	81

#	Article	IF	CITATIONS
94	A DVP-Based Bridge Architecture to Randomly Access Pixels of High-Speed Image Sensors. Eurasip Journal on Embedded Systems, 2011, 2011, 1-13.	1.2	3
95	High responsivity silicon MOS phototransistors. Sensors and Actuators A: Physical, 2011, 172, 434-439.	4.1	12
96	Threshold inverter quantizer based comparator for artificial silicon retina. Journal of Optics (India), 2011, 40, 39-44.	1.7	4
97	Universal bridge interface for DVP-compatible image sensors. Microprocessors and Microsystems, 2011, 35, 547-556.	2.8	5
98	A Low-Power Block-Based CMOS Image Sensor With Dual VDD. IEEE Sensors Journal, 2012, 12, 747-755.	4.7	9
99	High dynamic range CMOS (HDRC) imagers for safety systems. Advanced Optical Technologies, 2013, 2, 147-157.	1.7	3
100	Circuits for high performance complementary metal-oxide-semiconductor (CMOS) image sensors. , 2014, , 124-164.		2
103	Fixed pattern noise correction for wide dynamic range CMOS image sensor with Reinhard tone mapping operator. , 2015, , .		6
104	Simulation of improved CMOS digital pixel sensor for computer vision. Journal of Optics (India), 2017, 46, 1-7.	1.7	1
105	Electrical characteristics of silicon nanowire CMOS inverters under illumination. Optics Express, 2018, 26, 3527.	3.4	5
106	CMOS circuits for high-performance imaging. , 2020, , 119-160.		1
107	Image Sensor Technology. Springer Series in Optical Sciences, 2011, , 27-47.	0.7	1
108	Semiconductor Image Sensing., 2009, , 239-278.		2
109	On-Chip Vision., 1994,, 83-103.		0
110	Low-Power Micro-Cameras for Mobile Multimedia Devices. , 2003, , 361-401.		3
111	A low-cost optical sensor for precise position and motion estimation of fast-moving objects. , 0, , .		1
112	Design of CMOS active pixels based on finger-shaped PPD. Journal of Semiconductors, 2020, 41, 102301.	3.7	0
113	Selected Topics on Photon Transduction. , 2022, , 425-467.		0

#	Article	IF	CITATIONS
115	Parasitic Coupling in 3D Sequential Integration: The Example of a Two-Layer 3D Pixel. Technologies, 2022, 10, 38.	5.1	1
116	Image Sensorâ€"CCD and CMOS. Lecture Notes in Electrical Engineering, 2023, , 455-484.	0.4	2