

Takashi Tokuda

List of Publications by Year in descending order

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239
papers

3,095
citations

186265

28
h-index

206112

48
g-index

242
all docs

242
docs citations

242
times ranked

1959
citing authors

#	ARTICLE	IF	CITATIONS
1	Lensless dual-color fluorescence imaging device using hybrid filter. Japanese Journal of Applied Physics, 2022, 61, SC1020.	1.5	6
2	Polarization Image Sensor for Highly Sensitive Polarization Modulation Imaging Based on Stacked Polarizers. IEEE Transactions on Electron Devices, 2022, 69, 2924-2931.	3.0	13
3	Investigating the Influence of GABA Neurons on Dopamine Neurons in the Ventral Tegmental Area Using Optogenetic Techniques. International Journal of Molecular Sciences, 2022, 23, 1114.	4.1	6
4	Optical Biosensors: Implantable Multimodal Devices in Freely Moving Rodents. , 2022, , 143-157.		0
5	Micro-LED Array-Based Photo-Stimulation Devices for Optogenetics in Rat and Macaque Monkey Brains. IEEE Access, 2021, 9, 127937-127949.	4.2	11
6	CMOS-Based Neural Interface Device for Optogenetics. Advances in Experimental Medicine and Biology, 2021, 1293, 585-600.	1.6	1
7	Image Sensor with Hybrid Emission Filter for <i>in-vivo</i> Fluorescent Imaging. IEEJ Transactions on Sensors and Micromachines, 2021, 141, 71-76.	0.1	2
8	Miniaturized LED light source with an excitation filter for fluorescent imaging. Japanese Journal of Applied Physics, 2021, 60, SBBC07.	1.5	4
9	Wearable and Battery-Free Health-Monitoring Devices With Optical Power Transfer. IEEE Sensors Journal, 2021, 21, 9402-9412.	4.7	14
10	Image sensor with hybrid emission filter for in vivo fluorescent imaging. Electronics and Communications in Japan, 2021, 104, e12313.	0.5	1
11	Simultaneous CMOS-Based Imaging of Calcium Signaling of the Central Amygdala and the Dorsal Raphe Nucleus During Nociception in Freely Moving Mice. Frontiers in Neuroscience, 2021, 15, 667708.	2.8	10
12	Self-Reset Image Sensor With a Signal-to-Noise Ratio Over 70 dB and Its Application to Brain Surface Imaging. Frontiers in Neuroscience, 2021, 15, 667932.	2.8	5
13	AC power supply circuit architecture for a miniaturised retinal prosthesis device. Journal of Engineering, 2021, 2021, 546-551.	1.1	0
14	Ultrasmall compact CMOS imaging system for bioluminescence reporter-based live gene expression analysis. Journal of Biomedical Optics, 2021, 26, .	2.6	2
15	Implantable CMOS image sensor with a neural amplifier for simultaneous recording of optical and electrophysiological signals. , 2021, , .		3
16	Improved Charge Pump Design and <i>Ex Vivo</i> Experimental Validation of CMOS 256-Pixel Photovoltaic-Powered Subretinal Prosthetic Chip. IEEE Transactions on Biomedical Engineering, 2020, 67, 1490-1504.	4.2	16
17	Miniaturized CMOS imaging device for implantable applications. , 2020, , .		0
18	Guest Editorial: Special Issue on Selected Papers From IEEE BioCAS 2019. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 634-635.	4.0	0

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19	Retinal Prosthesis Using Thin-Film Devices on a Transparent Substrate and Wireless Power Transfer. IEEE Transactions on Electron Devices, 2020, 67, 529-534.	3.0	7
20	Needle-Type Imager Sensor With Band-Pass Composite Emission Filter and Parallel Fiber-Coupled Laser Excitation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 1082-1091.	5.4	17
21	Fabrication of thin composite emission filter for high-performance lens-free fluorescent imager. , 2020, , .		1
22	Present Status of Artificial Vision Based on Retinal Stimulation. Journal of Japan Institute of Electronics Packaging, 2020, 23, 403-408.	0.1	0
23	Spatial Resolution Improvement of Lensless Fluorescence Imaging Device with Hybrid Emission Filter. , 2020, , .		0
24	A Thin Composite Emission Filter and Fiber Coupled Laser Excitation for Implantable Fluorescence Imager Application. , 2019, , .		1
25	Wide field-of-view lensless fluorescence imaging device with hybrid bandpass emission filter. AIP Advances, 2019, 9, .	1.3	22
26	Direct Neural Interface. , 2019, , 139-174.		0
27	A CMOS 256-Pixel Self-Photovoltaics-Powered Subretinal Prosthetic Chip with Wide Image Dynamic Range and Shared Electrodes and Its In Vitro Experimental Results on Rd1 Mice. , 2019, , .		3
28	Propranolol prevents cerebral blood flow changes and pain-related behaviors in migraine model mice. Biochemical and Biophysical Research Communications, 2019, 508, 445-450.	2.1	7
29	Chronic brain blood-flow imaging device for a behavioral experiment using mice. Biomedical Optics Express, 2019, 10, 1557.	2.9	7
30	Present Status and Issues of Artificial Vision. Journal of the Institute of Electrical Engineers of Japan, 2019, 139, 164-167.	0.0	0
31	CMOS-based optical energy harvesting circuit for biomedical and Internet of Things devices. Japanese Journal of Applied Physics, 2018, 57, 04FM05.	1.5	10
32	1 mm ³ -sized optical neural stimulator based on CMOS integrated photovoltaic power receiver. AIP Advances, 2018, 8, .	1.3	46
33	Excitation and Emission Filters for Implantable Fluorescence Imaging Devices by Laser Lift-Off Process. , 2018, , .		0
34	Fabrication of Iridium Oxide/Platinum Composite Film on Titanium Substrate for High-Performance Neurostimulation Electrodes. Coatings, 2018, 8, 420.	2.6	7
35	Battery-Free. Sticker-Like, Device for Health Monitoring, Operated by Optical Power Transfer. , 2018, , .		1
36	Performance improvement and in vivo demonstration of a sophisticated retinal stimulator using smart electrodes with built-in CMOS microchips. Japanese Journal of Applied Physics, 2018, 57, 1002B3.	1.5	4

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37	Highly sensitive lens-free fluorescence imaging device enabled by a complementary combination of interference and absorption filters. Biomedical Optics Express, 2018, 9, 4329.	2.9	47
38	Compact Lensless Fluorescence Counting System for Single Molecular Assay. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1177-1185.	4.0	2
39	Live Demonstration: IoT micronode with optical ID transmission capability operated by optical energy harvesting. , 2018, , .		0
40	Functional Validation of Intelligent Retinal Stimulator Using Microchip-embedded Smart Electrode. Sensors and Materials, 2018, , 167.	0.5	4
41	A CMOS 256-pixel Photovoltaics-powered Implantable Chip with Active Pixel Sensors and Iridium-oxide Electrodes for Subretinal Prostheses. Sensors and Materials, 2018, , 193.	0.5	15
42	Electrochemical Evaluation of Geometrical Effect and Three-dimensionalized Effect of Iridium Oxide Electrodes Used for Retinal Stimulation. Sensors and Materials, 2018, , 213.	0.5	4
43	Design Optimization of CMOS Control Circuit for Integrated Photovoltaic Power Transfer. Sensors and Materials, 2018, 30, 2343.	0.5	2
44	Image Electronics Information Sensing. Kyokai Joho Imeji Zasshi/Journal of the Institute of Image Information and Television Engineers, 2018, 72, 537-550.	0.1	0
45	Implantable optogenetic device with CMOS IC technology for simultaneous optical measurement and stimulation. Japanese Journal of Applied Physics, 2017, 56, 057001.	1.5	7
46	On-chip cell analysis platform: Implementation of contact fluorescence microscopy in microfluidic chips. AIP Advances, 2017, 7, 095213.	1.3	22
47	Implantable Microimaging Device for Observing Brain Activities of Rodents. Proceedings of the IEEE, 2017, 105, 158-166.	21.3	35
48	Fluorescence imaging device with an ultra-thin micro-LED. , 2017, , .		0
49	Fabrication and in vivo demonstration of microchip-embedded smart electrode device for neural stimulation in retinal prosthesis. , 2017, , .		6
50	CMOS-based opto-electric neural interface devices for optogenetics. , 2017, , .		0
51	Implantable micro-sized image sensor for data transmission with intra-vital optical communication. Journal of Engineering, 2017, 2017, 4-6.	1.1	2
52	Initial Evaluation of the Safety and Durability of Retinal Prostheses Based on Suprachoroidal-transretinal Stimulation using Bullet-shaped Platinum Electrodes. Advanced Biomedical Engineering, 2017, 6, 8-14.	0.6	3
53	Automatic Determination of Blood Flow Velocity in Brain Microvessels in a Cerebral Infarction Model Mouse Using a Small Implantable CMOS Imaging Device. Advanced Biomedical Engineering, 2017, 6, 68-75.	0.6	1
54	Development of Chronic Implantable Electrodes for Long-term Visual Evoked Potential Recording in Rabbits. Advanced Biomedical Engineering, 2017, 6, 59-67.	0.6	3

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55	Stimulator Design of Retinal Prosthesis. IEICE Transactions on Electronics, 2017, E100.C, 523-528.	0.6	8
56	Long-Term Analysis of In Vivo Characteristics of Recording Electrode Using Electrochemical Impedance Spectroscopy. Sensors and Materials, 2017, , 1689.	0.5	0
57	Image Electronics Information Sensing. Kyokai Joho Imeji Zasshi/Journal of the Institute of Image Information and Television Engineers, 2016, 70, 609-622.	0.1	0
58	Mechanical Machining-based Three-Dimensional Electrode Array for Chronic Neural Stimulation. Advanced Biomedical Engineering, 2016, 5, 137-141.	0.6	5
59	Wireless image-data transmission from an implanted image sensor through a living mouse brain by intra body communication. Japanese Journal of Applied Physics, 2016, 55, 04EM03.	1.5	9
60	Neural stimulators for retinal prosthesis embedded with CMOS microchips. , 2016, , .		2
61	Optical communication with brain cells by means of an implanted duplex micro-device with optogenetics and Ca ²⁺ fluoroimaging Scientific Reports, 2016, 6, 21247.	3.3	20
62	Implantable micro-optical semiconductor devices for optical theranostics in deep tissue. Applied Physics Express, 2016, 9, 047001.	2.4	17
63	Hemodynamic imaging using an implantable self-reset image sensor. , 2016, , .		1
64	Compact lensless digital counting system for fluorescent micro-reaction-chamber array. , 2016, , .		1
65	Implantable self-reset CMOS image sensor and its application to hemodynamic response detection in living mouse brain. Japanese Journal of Applied Physics, 2016, 55, 04EM02.	1.5	20
66	In Vitro Long-Term Performance Evaluation and Improvement in the Response Time of CMOS-Based Implantable Glucose Sensors. IEEE Design and Test, 2016, 33, 37-48.	1.2	7
67	CMOS-Based Optoelectronic On-Chip Neural Interface Device. IEICE Transactions on Electronics, 2016, E99.C, 165-172.	0.6	4
68	Micro-optoelectronic devices for biomedical applications. , 2016, , .		0
69	On-chip fluorescence detection system with high-density microchamber array based on CMOS image sensor. , 2016, , .		2
70	CMOS-based opto-electronic neural interface devices for optogenetics. , 2016, 2016, 6319-6322.		2
71	Implantable imaging device for brain functional imaging system using flavoprotein fluorescence. Japanese Journal of Applied Physics, 2016, 55, 03DF02.	1.5	20
72	Micro-light-pipe array with an excitation attenuation filter for lensless digital enzyme-linked immunosorbent assay. Japanese Journal of Applied Physics, 2016, 55, 03DF03.	1.5	10

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73	An Implantable CMOS Image Sensor With Self-Reset Pixels for Functional Brain Imaging. IEEE Transactions on Electron Devices, 2016, 63, 215-222.	3.0	29
74	High coupling efficiency contact imaging system having micro light pipe array for a digital enzyme-linked immunosorbent assay. , 2015, , .		3
75	Intrinsic signal imaging of brain function using a small implantable CMOS imaging device. Japanese Journal of Applied Physics, 2015, 54, 04DL10.	1.5	17
76	Fabrication and functional demonstration of a smart electrode with a built-in CMOS microchip for neural stimulation of a retinal prosthesis. , 2015, 2015, 3355-8.		4
77	CMOS-based on-chip neural interface devices for optogenetics. , 2015, , .		0
78	CMOS-based implantable glucose monitoring device with improved performance and reduced invasiveness. Electronics Letters, 2015, 51, 738-740.	1.0	2
79	Intravital fluorescence imaging of mouse brain using implantable semiconductor devices and epi-illumination of biological tissue. Biomedical Optics Express, 2015, 6, 1553.	2.9	29
80	Fluorescence imaging under background light with a self-reset complementary metal-oxide-semiconductor image sensor. Journal of Engineering, 2015, 2015, 328-330.	1.1	4
81	A CMOS image sensor with stacked photodiodes for lensless observation system of digital enzyme-linked immunosorbent assay. Japanese Journal of Applied Physics, 2014, 53, 04EL02.	1.5	18
82	Digital signal transmission from fully implantable CMOS image sensor in simulated body environment. Electronics Letters, 2014, 50, 851-853.	1.0	2
83	CMOS sensor-based palm-sized inline optical analysis device for microchemistry systems. Electronics Letters, 2014, 50, 1222-1224.	1.0	1
84	Demonstration of implantable CMOS image sensors for functional brain imaging. , 2014, , .		1
85	An implantable image sensor with self-reset function for brain imaging. , 2014, , .		1
86	An implantable green fluorescence imaging device using absorption filters with high excitation light rejection ratio. , 2014, , .		3
87	CMOS image sensor-based implantable glucose sensor using glucose-responsive fluorescent hydrogel. Biomedical Optics Express, 2014, 5, 3859.	2.9	36
88	An implantable micro imaging device for molecular imaging in a brain of freely-moving mouse. , 2014, , .		1
89	On-chip polarizer on image sensor using advanced CMOS technology. , 2014, , .		1
90	An implantable CMOS device for blood-flow imaging during experiments on freely moving rats. Japanese Journal of Applied Physics, 2014, 53, 04EL05.	1.5	41

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91	Functional brain fluorescence plurimetry in rat by implantable concatenated CMOS imaging system. Biosensors and Bioelectronics, 2014, 53, 31-36.	10.1	13
92	Body channel digital pulse transmission for biometric measurement by fully implantable CMOS image sensor. , 2014, , .		0
93	Noise performance of an implantable self-reset CMOS image sensor. , 2014, , .		0
94	Performance improvement and functionalization of an electrode array for retinal prosthesis by iridium oxide coating and introduction of smart-wiring technology using CMOS microchips. Sensors and Actuators A: Physical, 2014, 211, 27-37.	4.1	15
95	Implantable CMOS imaging device with absorption filters for green fluorescence imaging. Proceedings of SPIE, 2014, , .	0.8	9
96	Dual-mode lensless imaging device for digital enzyme linked immunosorbent assay. , 2014, , .		8
97	[Paper] Demonstrations of Polarization Imaging Capability and Novel Functionality of Polarization-Analyzing CMOS Image Sensor with 65 nm Standard CMOS Process. ITE Transactions on Media Technology and Applications, 2014, 2, 131-138.	0.5	2
98	A CMOS microchip-based retinal prosthetic device for large numbers of stimulation in wide area. , 2013, , .		3
99	Optoelectronics devices for biomedical applications. , 2013, , .		0
100	Needle type CMOS imaging device for fluorescence imaging of deep brain activities with low invasiveness. , 2013, , .		2
101	A CMOS image sensor with low fixed pattern noise suitable for lensless observation system of digital enzyme-linked immunosorbent assay (ELISA). , 2013, , .		1
102	CMOS sensor-based miniaturised in-line dual-functional optical analyser for high-speed, in situ chirality monitoring. Sensors and Actuators B: Chemical, 2013, 176, 1032-1037.	7.8	3
103	Image sensor pixel with on-chip high extinction ratio polarizer based on 65-nm standard CMOS technology. Optics Express, 2013, 21, 11132.	3.4	49
104	Implantable image sensor based on intra-brain image transmission. , 2013, 2013, 1863-6.		3
105	Sputtering condition optimization of sputtered IrOx and TiN stimulus electrodes for retinal prosthesis. IEEJ Transactions on Electrical and Electronic Engineering, 2013, 8, 310-312.	1.4	14
106	[Paper] A CMOS Optoelectronic Neural Interface Device Based on an Image Sensor with On-chip Light Stimulation and Extracellular Neural Signal Recording for Optogenetics. ITE Transactions on Media Technology and Applications, 2013, 1, 184-189.	0.5	5
107	CMOS on-chip bio-imaging sensor with integrated micro light source array for optogenetics. Electronics Letters, 2012, 48, 312.	1.0	24
108	Smart electrode array device with CMOS multi-chip architecture for neural interface. Electronics Letters, 2012, 48, 1328.	1.0	13

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109	Complementary Metal-Oxide Semiconductor Image Sensor with Microchamber Array for Fluorescent Bead Counting. Japanese Journal of Applied Physics, 2012, 51, 02BL01.	1.5	12
110	CMOS image sensor integrated with micro-LED and multielectrode arrays for the patterned photostimulation and multichannel recording of neuronal tissue. Optics Express, 2012, 20, 6097.	3.4	24
111	Baseband signal transmission experiment for intra-brain communication with implantable image sensor. , 2012, 2012, 6011-4.		1
112	Optimization of Sputtering Condition of IrOx Thin Film Stimulation Electrode for Retinal Prosthesis Application. Journal of Physics: Conference Series, 2012, 352, 012005.	0.4	3
113	CMOS On-Chip Optoelectronic Neural Interface Device with Integrated Light Source for Optogenetics. Journal of Physics: Conference Series, 2012, 352, 012004.	0.4	4
114	On-chip metal wire grid polarizer for CMOS image sensor based on 65-nm technology. , 2012, , .		2
115	Dual-layer metal-grid polarizer for polarization image sensor in 65-nm CMOS technology. , 2012, , .		3
116	A micro imaging device for measuring neural activities in the mouse deep brain with minimal invasiveness. , 2012, , .		3
117	Image signal transmission through brain by an implantable micro-imager. , 2012, , .		0
118	Novel implantable imaging system for enabling simultaneous multiplanar and multipoint analysis for fluorescence potentiometry in the visual cortex. Biosensors and Bioelectronics, 2012, 38, 321-330.	10.1	33
119	Fabrication of a flexible neural interface device with CMOS-based smart electrodes. , 2011, , .		0
120	Micro CMOS image sensor for multi-area imaging. , 2011, , .		1
121	Functional neuroimaging by using an implantable CMOS multimodal device in a freely-moving mouse. , 2011, , .		10
122	CMOS-based intelligent neural interface device for optogenetics. Neuroscience Research, 2011, 71, e307-e308.	1.9	0
123	Investigation of detectability of a biomedical photonic LSI (BpLSI) device for voltage-sensitive dye imaging of mouse visual cortex. Neuroscience Research, 2011, 71, e205.	1.9	0
124	CMOS Imaging Devices for Biomedical Applications. IEICE Transactions on Communications, 2011, E94.B, 2454-2460.	0.7	7
125	Planar Multielectrode Array Coupled Complementary Metal Oxide Semiconductor Image Sensor for In vitro Electrophysiology. Japanese Journal of Applied Physics, 2011, 50, 04DL04.	1.5	0
126	Polarization Analyzing Image Sensor with On-Chip Metal Wire Grid Polarizer in 65-nm Standard Complementary Metal Oxide Semiconductor Process. Japanese Journal of Applied Physics, 2011, 50, 04DL01.	1.5	25

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127	Implantable CMOS imaging devices for bio-medical applications. , 2011, , .		2
128	Wireless intra-brain communication for image transmission through mouse brain. , 2011, 2011, 2917-20.		10
129	Optical and Electric Multifunctional CMOS Image Sensors for On-Chip Biosensing Applications. Materials, 2011, 4, 84-102.	2.9	12
130	Artificial Retina IC. Integrated Circuits and Systems, 2011, , 481-514.	0.2	10
131	Biomedical Devices based on Semiconductor Microelectronics Technologies. IEEJ Transactions on Sensors and Micromachines, 2011, 131, 404-408.	0.1	0
132	CMOS Imaging Device for Optical Imaging of Biological Activities. IEEJ Transactions on Electronics, Information and Systems, 2011, 131, 76-82.	0.2	0
133	Development of in situ Imaging Probe for Surgical Operation of Deep Brain Stimulation. IEEJ Transactions on Sensors and Micromachines, 2011, 131, 427-428.	0.1	0
134	Complementary Metal Oxide Semiconductor Based Multimodal Sensor for In vivo Brain Function Imaging with a Function for Simultaneous Cell Stimulation. Japanese Journal of Applied Physics, 2010, 49, 04DL02.	1.5	8
135	Development and in vivo Demonstration of CMOS-Based Multichip Retinal Stimulator With Simultaneous Multisite Stimulation Capability. IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 445-453.	4.0	30
136	A CMOS-based multichip flexible retinal stimulator for simultaneous multi-site stimulation. , 2010, 2010, 5883-6.		1
137	Potentiometric Dye Imaging for Pheochromocytoma and Cortical Neurons with a Novel Measurement System Using an Integrated Complementary Metalâ€“Oxideâ€“Semiconductor Imaging Device. Japanese Journal of Applied Physics, 2010, 49, 117001.	1.5	23
138	Multimodal Complementary Metalâ€“Oxideâ€“Semiconductor Sensor Device for Imaging of Fluorescence and Electrical Potential in Deep Brain of Mouse. Japanese Journal of Applied Physics, 2010, 49, 01AG02.	1.5	25
139	Implantable Image Sensor with Light Guide Array Plate for Bioimaging. Japanese Journal of Applied Physics, 2010, 49, 04DL03.	1.5	11
140	Microfluid Ejection Device Based on Complementary Metalâ€“Oxideâ€“Semiconductor Technology as an Artificial Synapse. Japanese Journal of Applied Physics, 2010, 49, 01AG03.	1.5	0
141	Potentiometric dye imaging for cortical neurons with a novel measurement system using a implantable CMOS imaging device. Neuroscience Research, 2010, 68, e331.	1.9	0
142	Light-controlled retinal stimulation on rabbit using CMOS-based flexible multi-chip stimulator. , 2009, 2009, 646-9.		2
143	CMOS image sensor for recording of intrinsic-optical-signal of the brain. , 2009, , .		1
144	A multimodal sensing device for fluorescence imaging and electrical potential measurement of neural activities in a mouse deep brain. , 2009, 2009, 5887-90.		0

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145	A CMOS-based chemical stimulator with microfluid ejection function toward an artificial synaptic device. , 2009, , .		0
146	Microchamber Device Equipped with Complementary Metal Oxide Semiconductor Optical Polarization Analyzer Chip for Micro Total Analysis System. Japanese Journal of Applied Physics, 2009, 48, 04C192.	1.5	3
147	Development of Complementary Metal Oxide Semiconductor Imaging Devices for Detecting Green Fluorescent Protein in the Deep Brain of a Freely Moving Mouse. Japanese Journal of Applied Physics, 2009, 48, 04C195.	1.5	33
148	A Low-Voltage Complementary Metal Oxide Semiconductor Image Sensor Using Pulse-Width-Modulation Scheme for Biomedical Applications. Japanese Journal of Applied Physics, 2009, 48, 04C193.	1.5	0
149	Implantable CMOS Biomedical Devices. Sensors, 2009, 9, 9073-9093.	3.8	85
150	Polarisation-analysing CMOS photosensor with monolithically embedded wire grid polariser. Electronics Letters, 2009, 45, 228.	1.0	50
151	CMOS-Based Multichip Networked Flexible Retinal Stimulator Designed for Image-Based Retinal Prosthesis. IEEE Transactions on Electron Devices, 2009, 56, 2577-2585.	3.0	57
152	CMOS-based flexible multi-site retinal stimulator toward retinal prosthesis technology. , 2009, , .		1
153	Polarization-analyzing CMOS image sensor using monolithically embedded polarizer for microchemistry systems. , 2009, , .		8
154	A CMOS sensor for in-vivo fluorescence and electrical imaging in a mouse brain. , 2009, , .		0
155	Light-controlled retinal stimulator for subretinal implantation. , 2009, , .		1
156	Polarization-Analyzing CMOS Image Sensor With Monolithically Embedded Polarizer for Microchemistry Systems. IEEE Transactions on Biomedical Circuits and Systems, 2009, 3, 259-266.	4.0	49
157	Real-time in vivo molecular quantification for freely-moving mouse's hippocampus. Neuroscience Research, 2009, 65, S226.	1.9	0
158	Polarization-Analyzing Image Sensor for .MU.TAS Based on Standard CMOS Technology. IEJ Transactions on Sensors and Micromachines, 2009, 129, 234-241.	0.1	0
159	An implantable and fully integrated complementary metalâ€“oxide semiconductor device for in vivo neural imaging and electrical interfacing with the mouse hippocampus. Sensors and Actuators A: Physical, 2008, 145-146, 176-186.	4.1	22
160	One-chip sensing device (biomedical photonic LSI) enabled to assess hippocampal steep and gradual up-regulated proteolytic activities. Journal of Neuroscience Methods, 2008, 173, 114-120.	2.5	42
161	CMOS LSI-based multi-chip flexible retinal prosthesis device for subretinal implantation. , 2008, , .		1
162	An implantable CMOS image sensor for monitoring deep brain activities of a freely moving mouse. , 2008, , .		8

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163	Retinal Stimulation on Rabbit Using Complementary Metal Oxide Semiconductor Based Multichip Flexible Stimulator toward Retinal Prosthesis. Japanese Journal of Applied Physics, 2008, 47, 3220-3225.	1.5	15
164	High-Density and Very Small-Size a Ge _{1-x} C _x Nanocrystal Assemblies on a Si(100) Substrate Fabricated Using Bionanoprocess with Proteins "Ferritin" and Solid Source Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2008, 47, 3028-3031.	1.5	8
165	Integrated In Vivo Neural Imaging and Interface CMOS Devices: Design, Packaging, and Implementation. IEEE Sensors Journal, 2008, 8, 121-130.	4.7	27
166	Multi-finger structure and pulsed-powering operation scheme for CMOS LSI-based flexible stimulator for retinal prosthesis. , 2008, 2008, 4212-5.		1
167	Polarization analyzing CMOS sensor for microchamber/microfluidic system based on image sensor technology. , 2008, , .		8
168	A visual prosthesis with 100 electrodes featuring wireless signals and wireless power transmission. IEICE Electronics Express, 2008, 5, 574-580.	0.8	12
169	Implantable Microimagers. Sensors, 2008, 8, 3183-3204.	3.8	11
170	CMOS LSI-based multichip flexible neural stimulation device with embedded bulk Pt electrodes. Electronics Letters, 2007, 43, 10.	1.0	2
171	A multi-microchip retinal stimulator for <i>in vitro</i> / <i>in vivo</i> experiments. , 2007, , .		0
172	A New Scheme for Imaging On-Chip Dry DNA Spots using Optical/Potential Dual-Image Complementary Metal Oxide Semiconductor Sensor. Japanese Journal of Applied Physics, 2007, 46, 2806-2810.	1.5	11
173	Fabrication and Validation of Multichip Neural Stimulator for In vivo Experiments toward Retinal Prosthesis. Japanese Journal of Applied Physics, 2007, 46, 2792-2798.	1.5	10
174	Integration of CMOS and MEMS Technologies in the Development of a Neural Imaging and Interface Device: Showcase of an Emerging Bioimaging Technique. , 2007, , .		0
175	Laboratory investigation of microelectronics-based stimulators for large-scale suprachoroidal transretinal stimulation (STS). Journal of Neural Engineering, 2007, 4, S85-S91.	3.5	39
176	A low-voltage PWM CMOS imager with small pixel size using an in-pixel gate-common comparator. IEICE Electronics Express, 2007, 4, 271-276.	0.8	9
177	Development of a Fully Integrated Complementary Metal "Oxide" Semiconductor Image Sensor-Based Device for Real-Time In vivo Fluorescence Imaging inside the Mouse Hippocampus. Japanese Journal of Applied Physics, 2007, 46, 2811-2819.	1.5	4
178	Optical and electrochemical dual-image CMOS sensor for on-chip biomolecular sensing applications. Sensors and Actuators A: Physical, 2007, 135, 315-322.	4.1	51
179	A CMOS LSI-Based Flexible Retinal Stimulator for Retinal Prosthesis. IEJ Transactions on Electronics, Information and Systems, 2007, 127, 1588-1594.	0.2	0
180	On-Chip In vivo Functional Imaging of the Mouse Brain Using a CMOS Image Sensor. , 2006, , .		0

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181	A pulse-frequency-modulation vision chip using a capacitive feedback reset with an in-pixel 1-bit image processor. , 2006, 6068, 102.		0
182	An optical and potential dual-image CMOS sensor for bioscientific applications. , 2006, , .		1
183	In vitro and in vivo on-chip biofluorescence imaging using a CMOS image sensor. , 2006, , .		2
184	Flexible and extensible retinal prosthesis based on multi-chip architecture. , 2006, , .		0
185	Functional verification of pulse frequency modulation-based image sensor for retinal prosthesis by in vitro electrophysiological experiments using frog retina. Biosensors and Bioelectronics, 2006, 21, 1059-1068.	10.1	18
186	A CMOS image sensor with optical and potential dual imaging function for on-chip bioscientific applications. Sensors and Actuators A: Physical, 2006, 125, 273-280.	4.1	51
187	The development of a multichannel electrode array for retinal prostheses. Journal of Artificial Organs, 2006, 9, 263-266.	0.9	31
188	On-chip biofluorescence imaging inside a brain tissue phantom using a CMOS image sensor for in vivo brain imaging verification. Sensors and Actuators B: Chemical, 2006, 119, 262-274.	7.8	53
189	Real time in vivo imaging and measurement of serine protease activity in the mouse hippocampus using a dedicated complementary metal-oxide semiconductor imaging device. Journal of Neuroscience Methods, 2006, 156, 23-30.	2.5	39
190	A New Neural Imaging Approach Using a CMOS Imaging Device. , 2006, 2006, 1061-4.		2
191	A Complementary Metal-oxide Semiconductor Image Sensor for On-Chip in Vitro and in Vivo Imaging of the Mouse Hippocampus. Japanese Journal of Applied Physics, 2006, 45, 3799-3806.	1.5	11
192	Optimization of Electrical Stimulus Pulse Parameter for Low-Power Operation of Retinal Prosthetic Device. Japanese Journal of Applied Physics, 2006, 45, L505-L507.	1.5	0
193	Pulse frequency modulation based CMOS image sensor for subretinal stimulation. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2006, 53, 487-491.	2.2	17
194	Development of a CMOS Imaging Device for Functional Imaging Inside the Mouse Brain. , 2006, , .		0
195	1-1 Information Sensing. Kyokai Joho Imeji Zasshi/Journal of the Institute of Image Information and Television Engineers, 2006, 60, 1160-1168.	0.1	0
196	A New Neural Imaging Approach Using a CMOS Imaging Device. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
197	Pulse modulation image sensors for on-chip bioimaging and biosensing applications. , 2005, , .		1
198	Micro-sized photo-detecting stimulator array for retinal prosthesis by distributed sensor network approach. Sensors and Actuators A: Physical, 2005, 120, 78-87.	4.1	12

#	ARTICLE	IF	CITATIONS
199	Flexible and extendible neural interface device based on cooperative multi-chip CMOS LSI architecture. Sensors and Actuators A: Physical, 2005, 122, 88-98.	4.1	48
200	Nanoscope observation of bistable piezoresponse, polarization retention, and domain imaging of sub-50 nm-thick (Pb,La)(Zr,Ti)O ₃ thin films. Materials Letters, 2005, 59, 1234-1238.	2.6	3
201	Flexible and Extendible Neural Stimulation Device with Distributed Multichip Architecture for Retinal Prosthesis. Japanese Journal of Applied Physics, 2005, 44, 2099-2103.	1.5	9
202	A CMOS optical/potential image sensor with 7.5 μ m pixel size for on-chip neural and DNA spot sensing. , 2005, 2005, 7269-72.		3
203	A 0.9-V pulse frequency modulation photosensor based on capacitive feedback reset. , 2005, , .		0
204	CMOS retinal prosthesis with on-chip electrode impedance measurement. Electronics Letters, 2004, 40, 582.	1.0	4
205	Flexible and extendible neural stimulation/recording device based on cooperative multi-chip CMOS LSI architecture. , 2004, 2004, 4322-5.		3
206	Fabrication and current-drive of SiGe δ -Si δ -Micro-origami δ ™ epitaxial MEMS device on SOI substrate. Electronics Letters, 2004, 40, 1333.	1.0	9
207	Pulse-Domain Digital Image Processing for Vision Chips Employing Low-Voltage Operation in Deep-Submicrometer Technologies. IEEE Journal of Selected Topics in Quantum Electronics, 2004, 10, 816-828.	2.9	28
208	Building a Simple Model of a Pulse-Frequency-Modulation Photosensor and Demonstration of a 128 x 128-pixel Pulse-Frequency-Modulation Image Sensor Fabricated in a Standard 0.35- μ m Complementary Metal-Oxide Semiconductor Technology. Optical Review, 2004, 11, 176-181.	2.0	6
209	A high-sensitive digital photosensor using MOS interface-trap charge pumping. IEICE Electronics Express, 2004, 1, 556-561.	0.8	0
210	MBE growth mode and C incorporation of GeC epilayers on Si(001) substrates using an arc plasma gun as a novel C source. Journal of Crystal Growth, 2003, 249, 78-86.	1.5	25
211	Large band gap bowing of MBE-grown GeC/Si(001) layers. Journal of Crystal Growth, 2003, 255, 273-276.	1.5	8
212	Effect of Ar ⁺ ion irradiation on substitutional C incorporation into MBE-grown GeC/Si(001). Journal of Crystal Growth, 2003, 258, 251-255.	1.5	2
213	A Study of Bending Effect on Pulse-Frequency-Modulation-Based Photosensor for Retinal Prosthesis. Japanese Journal of Applied Physics, 2003, 42, 7621-7624.	1.5	14
214	SiGe/Si microtubes fabricated on a silicon-on-insulator substrate. Journal Physics D: Applied Physics, 2003, 36, L67-L69.	2.8	16
215	Pixel design of pulsed CMOS image sensor for retinal prosthesis with digital photosensitivity control. Electronics Letters, 2003, 39, 419.	1.0	37
216	System implementation of a CMOS vision chip for visual recovery. , 2003, , .		0

#	ARTICLE	IF	CITATIONS
217	Back-illuminated pulse-frequency-modulated photosensor using silicon-on-sapphire technology developed for use as epi-retinal prosthesis device. Electronics Letters, 2003, 39, 1102.	1.0	17
218	Proposal of Application of Pulsed Vision Chip for Retinal Prosthesis. Japanese Journal of Applied Physics, 2002, 41, 2322-2325.	1.5	66
219	Low-voltage operation of a CMOS image sensor based on pulse frequency modulation. , 2001, 4306, 319.		1
220	<title>Pulsed vision chip with inhibitory interconnections</title>. , 2000, , .		2
221	Wafer Fusion Technique Applied to GaN/GaN System. Japanese Journal of Applied Physics, 2000, 39, L572-L574.	1.5	12
222	Pulse-Modulated Vision Chips with Versatile-Interconnected Pixels. Lecture Notes in Computer Science, 2000, , 1063-1071.	1.3	7
223	Coherent two-dimensional lasing action in surface-emitting laser with triangular-lattice photonic crystal structure. Applied Physics Letters, 1999, 75, 316-318.	3.3	650
224	Growth characteristics of GaInN on (0001)sapphire by plasma-excited organometallic vapor phase epitaxy. Journal of Crystal Growth, 1998, 187, 178-184.	1.5	3
225	Substrate nitridation effect and low temperature growth of GaN on sapphire (0 0 0 1) by plasma-excited organometallic vapor-phase epitaxy. Journal of Crystal Growth, 1998, 183, 62-68.	1.5	20
226	Compositional inhomogeneity and immiscibility of a GaInN ternary alloy. Applied Physics Letters, 1997, 71, 906-908.	3.3	98
227	Plasma-excited organometallic vapor phase epitaxy of GaN on (0 0 0 1)sapphire. Journal of Crystal Growth, 1997, 173, 237-243.	1.5	16
228	Island formation of InAs grown on GaAs. Journal of Crystal Growth, 1995, 146, 363-367.	1.5	32
229	A CMOS neural-interface chip with 3-channel voltage monitoring for retinal prosthesis. , 0, , .		0
230	Improvement of a pulse frequency modulation based photosensor for retinal prosthesis. , 0, , .		0
231	A 16x16-pixel pulse-frequency-modulation based image sensor for retinal prosthesis. , 0, , .		1
232	A retinal prosthetic device using a pulse-frequency-modulation CMOS image sensor. , 0, , .		0
233	Wide dynamic range pulse modulation image sensor for on-chip bioimaging applications. , 0, , .		4
234	Improvement of saturation characteristics of a frequency-demodulation CMOS image sensor. , 0, , .		0

#	ARTICLE	IF	CITATIONS
235	A micro-sized photo detectable stimulator array for retinal prosthesis by distributed sensor network approach. , 0, , .		0
236	Retinal prosthesis device based on pulse-frequency-modulation vision chip. , 0, , .		6
237	Pulse modulation CMOS image sensor for bio-fluorescence imaging applications. , 0, , .		8
238	Toward 1000-ch electrode array based on distributed microchip architecture for retinal prosthesis. , 0, , .		1
239	CMOS technologies for retinal prosthesis. , 0, , 313-324.		0