Takashi Tokuda

List of Publications by Year
in descending order

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239	3,095	186265	206112
papers	citations	28 h-index	48 g-index

242	242	242	1959
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Compositional inhomogeneity and immiscibility of a GaInN ternary alloy. Applied Physics Letters, 1997, 71, 906-908.	3.3	98
3	Implantable CMOS Biomedical Devices. Sensors, 2009, 9, 9073-9093.	3.8	85
4	Proposal of Application of Pulsed Vision Chip for Retinal Prosthesis. Japanese Journal of Applied Physics, 2002, 41, 2322-2325.	1.5	66
5	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
6	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
7	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
8	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
9	Polarisation-analysing CMOS photosensor with monolithically embedded wire grid polariser. Electronics Letters, 2009, 45, 228.	1.0	50
10	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
11	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
12	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
13	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
14	1 mm3-sized optical neural stimulator based on CMOS integrated photovoltaic power receiver. AIP Advances, 2018, 8, .	1.3	46
15	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
16	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
17	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
18	Laboratory investigation of microelectronics-based stimulators for large-scale suprachoroidal transretinal stimulation (STS). Journal of Neural Engineering, 2007, 4, S85-S91.	3.5	39

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19	Pixel design of pulsed CMOS image sensor for retinal prosthesis with digital photosensitivity control. Electronics Letters, 2003, 39, 419.	1.0	37
20	CMOS image sensor-based implantable glucose sensor using glucose-responsive fluorescent hydrogel. Biomedical Optics Express, 2014, 5, 3859.	2.9	36
21	Implantable Microimaging Device for Observing Brain Activities of Rodents. Proceedings of the IEEE, 2017, 105, 158-166.	21.3	35
22	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
23	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
24	Island formation of InAs grown on GaAs. Journal of Crystal Growth, 1995, 146, 363-367.	1.5	32
25	The development of a multichannel electrode array for retinal prostheses. Journal of Artificial Organs, 2006, 9, 263-266.	0.9	31
26	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
27	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
28	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
29	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
30	Integrated In Vivo Neural Imaging and Interface CMOS Devices: Design, Packaging, and Implementation. IEEE Sensors Journal, 2008, 8, 121-130.	4.7	27
31	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
32	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
33	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
34	CMOS on-chip bio-imaging sensor with integrated micro light source array for optogenetics. Electronics Letters, 2012, 48, 312.	1.0	24
35	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
36	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

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37	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
38	On-chip cell analysis platform: Implementation of contact fluorescence microscopy in microfluidic chips. AIP Advances, 2017, 7, 095213.	1.3	22
39	Wide field-of-view lensless fluorescence imaging device with hybrid bandpass emission filter. AIP Advances, 2019, 9, .	1.3	22
40	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
41	â€œOptical communication with brain cells by means of an implanted duplex micro-device with optogenetics and Ca2+ fluoroimagingâ€• Scientific Reports, 2016, 6, 21247.	3.3	20
42	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
43	Implantable imaging device for brain functional imaging system using flavoprotein fluorescence. Japanese Journal of Applied Physics, 2016, 55, 03DF02.	1.5	20
44	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
45	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
46	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
47	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
48	Intrinsic signal imaging of brain function using a small implantable CMOS imaging device. Japanese Journal of Applied Physics, 2015, 54, 04DL10.	1.5	17
49	Implantable micro-optical semiconductor devices for optical theranostics in deep tissue. Applied Physics Express, 2016, 9, 047001.	2.4	17
50	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
51	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
52	SiGe/Si microtubes fabricated on a silicon-on-insulator substrate. Journal Physics D: Applied Physics, 2003, 36, L67-L69.	2.8	16
53	Improved Charge Pump Design and Ex Vivo Experimental Validation of CMOS 256-Pixel Photovoltaic-Powered Subretinal Prosthetic Chip. IEEE Transactions on Biomedical Engineering, 2020, 67, 1490-1504.	4.2	16
54	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

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55	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
56	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
57	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
58	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
59	Wearable and Battery-Free Health-Monitoring Devices With Optical Power Transfer. IEEE Sensors Journal, 2021, 21, 9402-9412.	4.7	14
60	Smart electrode array device with CMOS multi-chip architecture for neural interface. Electronics Letters, 2012, 48, 1328.	1.0	13
61	Functional brain fluorescence plurimetry in rat by implantable concatenated CMOS imaging system. Biosensors and Bioelectronics, 2014, 53, 31-36.	10.1	13
62	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
63	Wafer Fusion Technique Applied to GaN/GaN System. Japanese Journal of Applied Physics, 2000, 39, L572-L574.	1.5	12
64	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
65	A visual prosthesis with 100 electrodes featuring wireless signals and wireless power transmission. IEICE Electronics Express, 2008, 5, 574-580.	0.8	12
66	Optical and Electric Multifunctional CMOS Image Sensors for On-Chip Biosensing Applications. Materials, 2011, 4, 84-102.	2.9	12
67	Complementary Metalâ€“Oxideâ€“Semiconductor Image Sensor with Microchamber Array for Fluorescent Bead Counting. Japanese Journal of Applied Physics, 2012, 51, 02BL01.	1.5	12
68	A Complementary Metalâ€“Oxideâ€“Semiconductor Image Sensor for On-Chipin Vitroandin VivoImaging of the Mouse Hippocampus. Japanese Journal of Applied Physics, 2006, 45, 3799-3806.	1.5	11
69	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
70	Implantable Microimagers. Sensors, 2008, 8, 3183-3204.	3.8	11
71	Implantable Image Sensor with Light Guide Array Plate for Bioimaging. Japanese Journal of Applied Physics, 2010, 49, 04DL03.	1.5	11
72	Micro-LED Array-Based Photo-Stimulation Devices for Optogenetics in Rat and Macaque Monkey Brains. IEEE Access, 2021, 9, 127937-127949.	4.2	11

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73	Fabrication and Validation of Multichip Neural Stimulator forIn vivoExperiments toward Retinal Prosthesis. Japanese Journal of Applied Physics, 2007, 46, 2792-2798.	1.5	10
74	Functional neuroimaging by using an implantable CMOS multimodal device in a freely-moving mouse. , 2011, , .		10
75	Wireless intra-brain communication for image transmission through mouse brain. , 2011, 2011, 2917-20.		10
76	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
77	CMOS-based optical energy harvesting circuit for biomedical and Internet of Things devices. Japanese Journal of Applied Physics, 2018, 57, 04FM05.	1.5	10
78	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
79	Artificial Retina IC. Integrated Circuits and Systems, 2011, , 481-514.	0.2	10
80	Fabrication and current-drive of SiGeâˆ•Si â€˜Micro-origamiâ€™ epitaxial MEMS device on SOI substrate. Electronics Letters, 2004, 40, 1333.	1.0	9
81	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
82	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
83	Implantable CMOS imaging device with absorption filters for green fluorescence imaging. Proceedings of SPIE, 2014, , .	0.8	9
84	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
85	Large band gap bowing of MBE-grown GeC/Si(001) layers. Journal of Crystal Growth, 2003, 255, 273-276.	1.5	8
86	Pulse modulation CMOS image sensor for bio-fluorescence imaging applications. , 0, , .		8
87	An implantable CMOS image sensor for monitoring deep brain activities of a freely moving mouse. , 2008, , .		8
88	High-Density and Very Small-Size a Ge1-xCxNanocrystal Assemblies on a Si(100) Substrate Fabricated Using Bionanoprocess with Proteins â€œFerritinâ€•and Solid Source Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2008, 47, 3028-3031.	1.5	8
89	Polarization analyzing CMOS sensor for microchamber/microfluidic system based on image sensor technology. , 2008, , .		8
90	Polarization-analyzing CMOS image sensor using monolithically embedded polarizer for microchemistry systems. , 2009, , .		8

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91	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
92	Dual-mode lensless imaging device for digital enzyme linked immunosorbent assay. , 2014, , .		8
93	Stimulator Design of Retinal Prosthesis. IEICE Transactions on Electronics, 2017, E100.C, 523-528.	0.6	8
94	Pulse-Modulated Vision Chips with Versatile-Interconnected Pixels. Lecture Notes in Computer Science, 2000, , 1063-1071.	1.3	7
95	CMOS Imaging Devices for Biomedical Applications. IEICE Transactions on Communications, 2011, E94.B, 2454-2460.	0.7	7
96	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
97	Implantable optogenetic device with CMOS IC technology for simultaneous optical measurement and stimulation. Japanese Journal of Applied Physics, 2017, 56, 057001.	1.5	7
98	Fabrication of Iridium Oxide/Platinum Composite Film on Titanium Substrate for High-Performance Neurostimulation Electrodes. Coatings, 2018, 8, 420.	2.6	7
99	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
100	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
101	Chronic brain blood-flow imaging device for a behavioral experiment using mice. Biomedical Optics Express, 2019, 10, 1557.	2.9	7
102	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-$mUm Complementary Metal-Oxide Semiconductor Technology. Optical Review, 2004, 11, 176-181.	2.0	6
103	Retinal prosthesis device based on pulse-frequency-modulation vision chip. , 0, , .		6
104	Fabrication and in vivo demonstration of microchip-embedded smart electrode device for neural stimulation in retinal prosthesis. , 2017, , .		6
105	Lensless dual-color fluorescence imaging device using hybrid filter. Japanese Journal of Applied Physics, 2022, 61, SC1020.	1.5	6
106	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
107	Mechanical Machining-based Three-Dimensional Electrode Array for Chronic Neural Stimulation. Advanced Biomedical Engineering, 2016, 5, 137-141.	0.6	5
108	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

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109	[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
110	CMOS retinal prosthesis with on-chip electrode impedance measurement. Electronics Letters, 2004, 40, 582.	1.0	4
111	Wide dynamic range pulse modulation image sensor for on-chip bioimaging applications. , 0, , .		4
112	Development of a Fully Integrated Complementary Metalâ€“Oxideâ€“Semiconductor Image Sensor-Based Device for Real-TimeIn vivoFluorescence Imaging inside the Mouse Hippocampus. Japanese Journal of Applied Physics, 2007, 46, 2811-2819.	1.5	4
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	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
115	CMOS-Based Optoelectronic On-Chip Neural Interface Device. IEICE Transactions on Electronics, 2016, E99.C, 165-172.	0.6	4
116	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
117	Miniaturized LED light source with an excitation filter for fluorescent imaging. Japanese Journal of Applied Physics, 2021, 60, SBBG07.	1.5	4
118	Fluorescence imaging under background light with a selfâ€reset complementary metalâ€“oxideâ€“semiconductor image sensor. Journal of Engineering, 2015, 2015, 328-330.	1.1	4
119	Functional Validation of Intelligent Retinal Stimulator Using Microchip-embedded Smart Electrode. Sensors and Materials, 2018, , 167.	0.5	4
120	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
121	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
122	Flexible and extendible neural stimulation/recording device based on cooperative multi-chip CMOS LSI architecture. , 2004, 2004, 4322-5.		3
123	Nanoscopic observation of bistable piezoresponse, polarization retention, and domain imaging of sub-50 nm-thick (Pb,La)(Zr,Ti)O3 thin films. Materials Letters, 2005, 59, 1234-1238.	2.6	3
124	A CMOS optical/potential image sensor with 7.5μm pixel size for on-chip neural and DNA spot sensing. , 2005, 2005, 7269-72.		3
125	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
126	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

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127	Dual-layer metal-grid polarizer for polarization image sensor in 65-nm CMOS technology. , 2012, , .		3
128	A micro imaging device for measuring neural actvities in the mouse deep brain with minimal invasiveness. , 2012, , .		3
129	A CMOS microchip-based retinal prosthetic device for large numbers of stimulation in wide area. , 2013, , .		3
130	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
131	Implantable image sensor based on intra-brain image transmission. , 2013, 2013, 1863-6.		3
132	An implantable green fluorescence imaging device using absorption filters with high excitation light rejection ratio. , 2014, , .		3
133	High coupling efficiency contact imaging system having micro light pipe array for a digital enzyme-linked immunosorbent assay. , 2015, , .		3
134	Initial Evaluation of the Safety and Durability of Retinal Prostheses Based on Suprachoroidalâ€“transretinal Stimulation using Bullet-shaped Platinum Electrodes. Advanced Biomedical Engineering, 2017, 6, 8-14.	0.6	3
135	Development of Chronic Implantable Electrodes for Long-term Visual Evoked Potential Recording in Rabbits. Advanced Biomedical Engineering, 2017, 6, 59-67.	0.6	3
136	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
137	Implantable CMOS image sensor with a neural amplifier for simultaneous recording of optical and electrophysiological signals. , 2021, , .		3
138	<title>Pulsed vision chip with inhibitory interconnections</title>. , 2000, , .		2
139	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
140	In vitro and in vivo on-chip biofluorescence imaging using a CMOS image sensor. , 2006, , .		2
141	A New Neural Imaging Approach Using a CMOS Imaging Device. , 2006, 2006, 1061-4.		2
142	CMOS LSI-based multichip flexible neural stimulation device with embedded bulk Pt electrodes. Electronics Letters, 2007, 43, 10.	1.0	2
143	Light-controlled retinal stimulation on rabbit using CMOS-based flexible multi-chip stimulator. , 2009, 2009, 646-9.		2
144	Implantable CMOS imaging devices for bio-medical applications. , 2011, , .		2

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145	On-chip metal wire grid polarizer for CMOS image sensor based on 65-nm technology. , 2012, , .		2
146	Needle type CMOS imaging device for fluorescence imaging of deep brain activities with low invasiveness. , 2013, , .		2
147	Digital signal transmission from fully implantable CMOS image sensor in simulated body environment. Electronics Letters, 2014, 50, 851-853.	1.0	2
148	CMOSâ€based implantable glucose monitoring device with improved performance and reduced invasiveness. Electronics Letters, 2015, 51, 738-740.	1.0	2
149	Neural stimulators for retinal prosthesis embedded with CMOS microchips. , 2016, , .		2
150	On-chip fluorescence detection system with high-density microchamber array based on CMOS image sensor. , 2016, , .		2
151	CMOS-based opto-electronic neural interface devices for optogenetics. , 2016, 2016, 6319-6322.		2
152	Implantable microâ€sized image sensor for data transmission with intraâ€vital optical communication. Journal of Engineering, 2017, 2017, 4-6.	1.1	2
153	Compact Lensless Fluorescence Counting System for Single Molecular Assay. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1177-1185.	4.0	2
154	Image Sensor with Hybirid Emission Filter for <i>in-vivo</i> Fluorescent Imaging. IEEJ Transactions on Sensors and Micromachines, 2021, 141, 71-76.	0.1	2
155	[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
156	Design Optimization of CMOS Control Circuit for Integrated Photovoltaic Power Transfer. Sensors and Materials, 2018, 30, 2343.	0.5	2
157	Ultrasmall compact CMOS imaging system for bioluminescence reporter-based live gene expression analysis. Journal of Biomedical Optics, 2021, 26, .	2.6	2
158	Low-voltage operation of a CMOS image sensor based on pulse frequency modulation. , 2001, 4306, 319.		1
159	A 16x16-pixel pulse-frequency-modulation based image sensor for retinal prosthesis. , 0, , .		1
160	Pulse modulation image sensors for on-chip bioimaging and biosensing applications. , 2005, , .		1
161	An optical and potential dual-image CMOS sensor for bioscientific applications. , 2006, , .		1
162	Toward 1OOO-ch electrode array based on distributed microchip architecture for retinal prosthesis. , 0, , .		1

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163	CMOS LSI-based multi-chip flexible retinal prosthesis device for subretinal implantation. , 2008, , .		1
164	Multi-finger structure and pulsed-powering operation scheme for CMOS LSI-based flexible stimulator for retinal prosthesis. , 2008, 2008, 4212-5.		1
165	CMOS image sensor for recording of intrinsic-optical-signal of the brain. , 2009, , .		1
166	CMOS-based flexible multi-site retinal stimulator toward retinal prosthesis technology. , 2009, , .		1
167	Light-controlled retinal stimulator for subretinal implantation. , 2009, , .		1
168	A CMOS-based multichip flexible retinal stimulator for simultaneous multi-site stimulation. , 2010, 2010, 5883-6.		1
169	Micro CMOS image sensor for multi-area imaging. , 2011, , .		1
170	Baseband signal transmission experiment for intra-brain communication with implantable image sensor. , 2012, 2012, 6011-4.		1
171	A CMOS image sensor with low fixed pattern noise suitable for lensless observation system of digital enzyme-linked immunosorbent assay (ELISA). , 2013, , .		1
172	CMOS sensorâ€based palmâ€sized inâ€line optical analysis device for microchemistry systems. Electronics Letters, 2014, 50, 1222-1224.	1.0	1
173	Demonstration of implantable CMOS image sensors for functional brain imaging. , 2014, , .		1
174	An implantable image sensor with self-reset function for brain imaging. , 2014, , .		1
175	An implantable micro imaging device for molecular imaging in a brain of freely-moving mouse. , 2014, , .		1
176	On-chip polarizer on image sensor using advanced CMOS technology. , 2014, , .		1
177	Hemodynamic imaging using an implantable self-reset image sensor. , 2016, , .		1
178	Compact lensless digital counting system for fluorescent micro-reaction-chamber array. , 2016, , .		1
179	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
180	Battery-Free. Sticker-Like, Device for Health Monitoring, Operated by Optical Power Transfer. , 2018, , .		1

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181	A Thin Composite Emission Filter and Fiber Coupled Laser Excitation for Implantable Fluorescence Imager Application. , 2019, , .		1
182	CMOS-Based Neural Interface Device for Optogenetics. Advances in Experimental Medicine and Biology, 2021, 1293, 585-600.	1.6	1
183	Image sensor with hybrid emission filter for in vivo fluorescent imaging. Electronics and Communications in Japan, 2021, 104, e12313.	0.5	1
184	Fabrication of thin composite emission filter for high-performance lens-free fluorescent imager. , 2020, , .		1
185	A CMOS neural-interface chip with 3-channel voltage monitoring for retinal prosthesis. , 0, , .		0
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