

# Makito Haruta

## List of Publications by Year in descending order

Source: [//exaly.com/author-pdf/9834564/publications.pdf](https://exaly.com/author-pdf/9834564/publications.pdf)

Version: 2024-02-01

101  
papers

972  
citations

482844

16  
h-index

488912

28  
g-index

103  
all docs

103  
docs citations

103  
times ranked

1181  
citing authors

#	ARTICLE	IF	CITATIONS
1	THz near-field intensity distribution imaging in the 0.3 THz band using a highly sensitive polarization CMOS image sensor using a 0.35 $\mu\text{m}$ CMOS process. Japanese Journal of Applied Physics, 2024, 63, 03SP66.	1.6	0
2	Demonstration of multi-point stimulation with AC-driven CMOS chips for retinal prosthesis. Japanese Journal of Applied Physics, 2024, 63, 03SP22.	1.6	0
3	Exposure Time Control Method for Higher Intermediate Frequency in Optical Heterodyne Imaging and Its Application to Electric-Field Imaging Based on Electro-Optic Effect. Sensors, 2024, 24, 1249.	4.0	1
4	TCTAP C-180 Optical Coherence Tomography Guided Management of Calcific Nodule With Intravascular Lithotripsy. Journal of the American College of Cardiology, 2024, 83, S349-S350.	5.6	0
5	Millimeter-Wave Band Electro-Optical Imaging System Using Polarization CMOS Image Sensor and Amplified Optical Local Oscillator Source. Sensors, 2024, 24, 4138.	4.0	0
6	Electrochemical activities of Fe <sub>2</sub> O <sub>3</sub> -modified microelectrode for dopamine detection using fast-scan cyclic voltammetry. AIP Advances, 2023, 13, 025026.	1.3	2
7	Implantable AC-driven CMOS chip for distributed multichip retinal prosthesis capable of high-rate stimulation. Japanese Journal of Applied Physics, 2023, 62, SC1077.	1.6	1
8	Thin and Scalable Hybrid Emission Filter via Plasma Etching for Low-Invasive Fluorescence Detection. Sensors, 2023, 23, 3695.	4.0	3
9	Inculcating Algebra Properties in the Context of Image Processing. , 2023, , .		0
10	Lensless dual-color fluorescence imaging device using hybrid filter. Japanese Journal of Applied Physics, 2022, 61, SC1020.	1.6	8
11	Polarization Image Sensor for Highly Sensitive Polarization Modulation Imaging Based on Stacked Polarizers. IEEE Transactions on Electron Devices, 2022, 69, 2924-2931.	3.2	14
12	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.	4.2	8
13	Optical Biosensors: Implantable Multimodal Devices in Freely Moving Rodents. , 2022, , 143-157.		0
14	Modular head-mounted cortical imaging device for chronic monitoring of intrinsic signals in mice. Journal of Biomedical Optics, 2022, 27, .	2.8	6
15	Enhancing infrared color reproducibility through multispectral image processing using RGB and three infrared channels. Optical Engineering, 2022, 61, .	1.0	2
16	Experimental Study on Fire Resistance of Concrete Beams Made with Iron Tailings Sand. Buildings, 2022, 12, 1816.	3.2	5
17	æ°—è±¡ç—...äfçãf†ãf«ãfzã, ã,1ã@ççç«. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2021, 94, 1-O-C		
18	Micro-LED Array-Based Photo-Stimulation Devices for Optogenetics in Rat and Macaque Monkey Brains. IEEE Access, 2021, 9, 127937-127949.	4.4	12

#	ARTICLE	IF	CITATIONS
19	CMOS-Based Neural Interface Device for Optogenetics. <i>Advances in Experimental Medicine and Biology</i> , 2021, 1293, 585-600.	0.0	1
20	Optical Powering Platform for Ultra-Small Implantable Devices. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2021, 141, 63-70.	0.1	0
21	Near-infrared fundus camera with a patterned interference filter for the retinal scattering detection. <i>Japanese Journal of Applied Physics</i> , 2021, 60, SBBL07.	1.6	4
22	Image Sensor with Hybrid Emission Filter for <i>in-vivo</i> Fluorescent Imaging. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2021, 141, 71-76.	0.1	2
23	Miniaturized LED light source with an excitation filter for fluorescent imaging. <i>Japanese Journal of Applied Physics</i> , 2021, 60, SBBG07.	1.6	4
24	Wearable and Battery-Free Health-Monitoring Devices With Optical Power Transfer. <i>IEEE Sensors Journal</i> , 2021, 21, 9402-9412.	4.8	16
25	Image sensor with hybrid emission filter for in vivo fluorescent imaging. <i>Electronics and Communications in Japan</i> , 2021, 104, e12313.	0.5	2
26	Simultaneous CMOS-Based Imaging of Calcium Signaling of the Central Amygdala and the Dorsal Raphe Nucleus During Nociception in Freely Moving Mice. <i>Frontiers in Neuroscience</i> , 2021, 15, 667708.	2.9	11
27	Randles Circuit Model for Characterizing a Porous Stimulating Electrode of the Retinal Prosthesis. <i>IEEJ Transactions on Sensors and Micromachines</i> , 2021, 141, 134-140.	0.1	2
28	Self-Reset Image Sensor With a Signal-to-Noise Ratio Over 70 dB and Its Application to Brain Surface Imaging. <i>Frontiers in Neuroscience</i> , 2021, 15, 667932.	2.9	6
29	Randles circuit model for characterizing a porous stimulating electrode of the retinal prosthesis. <i>Electronics and Communications in Japan</i> , 2021, 104, e12324.	0.5	0
30	AC power supply circuit architecture for a miniaturised retinal prosthesis device. <i>Journal of Engineering</i> , 2021, 2021, 546-551.	1.1	0
31	Honeycomb-type retinal device using chemically derived iridium oxide biointerfaces. <i>AIP Advances</i> , 2021, 11, .	1.3	4
32	æ°—è± ç—...äfçäfäf«äfzã,  ã,1ã@è,,3è;€æµä•æ...ã«ã-3/4ãªMã,ãª”è“æ•£ãªã,%ããªã«ãfã,ã,1/2ãf—ãfãf•ã,Sãf³ãããªããžœæ”è1/4f. Proc		
33	Dual-color lensless fluorescence imaging by using a notch interference filter and absorption filters. , 2021, , .		2
34	Ultrasmall compact CMOS imaging system for bioluminescence reporter-based live gene expression analysis. <i>Journal of Biomedical Optics</i> , 2021, 26, .	2.8	5
35	Optical Biosensors: Implantable Multimodal Devices in Freely Moving Rodents. , 2021, , 1-15.		0
36	Implantable CMOS image sensor with a neural amplifier for simultaneous recording of optical and electrophysiological signals. , 2021, , .		3

#	ARTICLE	IF	CITATIONS
37	Photoactivatable oncolytic adenovirus for optogenetic cancer therapy. Cell Death and Disease, 2020, 11, 570.	6.4	12
38	Miniaturized CMOS imaging device for implantable applications. , 2020, , .		0
39	Implantable Fluorescent CMOS Imaging Device. , 2020, , .		0
40	Fe <sub>2</sub> O <sub>3</sub> /MWCNTs modified microdialysis electrode for dopamine detection. Materials Research Express, 2020, 7, 015701.	1.7	9
41	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.	5.8	18
42	Fabrication of thin composite emission filter for high-performance lens-free fluorescent imager. , 2020, , .		1
43	Image refocusing of miniature CMOS image sensor with angle-selective pixels. , 2020, , .		0
44	Spatial Resolution Improvement of Lensless Fluorescence Imaging Device with Hybrid Emission Filter. , 2020, , .		0
45	Implantable CMOS Fluorescent Imaging Devices. Brain Informatics and Health, 2020, , 129-145.	0.0	0
46	Pernkopf's atlas: Should unethically obtained life-saving data be discarded?. Indian Journal of Medical Ethics, 2020, 05, 319-326.	0.4	1
47	Twin-screw granulation: Understanding the mechanical properties from powder to tablets. Powder Technology, 2019, 341, 104-115.	4.3	13
48	A Thin Composite Emission Filter and Fiber Coupled Laser Excitation for Implantable Fluorescence Imager Application. , 2019, , .		1
49	Wide field-of-view lensless fluorescence imaging device with hybrid bandpass emission filter. AIP Advances, 2019, 9, .	1.3	25
50	Acute ataxia in paediatric emergency departments: a multicentre Italian study. Archives of Disease in Childhood, 2019, 104, 768-774.	2.8	28
51	Live Demonstration: Lensless Highly Sensitive Fluorescence Imaging. , 2019, , .		0
52	THEORETICAL INVESTIGATION OF O <sub>2</sub> AND H <sub>2</sub> O CO-ADSORPTION ON Cu <sub>3</sub> Con(m+n=2 <sup>1/4</sup> ) CLUSTERS. Surface Review and Letters, 2019, 26, 1950064.	1.2	0
53	Propranolol prevents cerebral blood flow changes and pain-related behaviors in migraine model mice. Biochemical and Biophysical Research Communications, 2019, 508, 445-450.	2.2	8
54	Chronic brain blood-flow imaging device for a behavioral experiment using mice. Biomedical Optics Express, 2019, 10, 1557.	3.0	9

#	ARTICLE	IF	CITATIONS
55	Lens-free Dual-color Fluorescent CMOS Image Sensor for Förster Resonance Energy Transfer Imaging. <i>Sensors and Materials</i> , 2019, 31, 2579.	0.6	9
56	Propranolol prevents changes in cerebral blood flow and pain-related behaviors in migraine model mice. <i>Proceedings for Annual Meeting of the Japanese Pharmacological Society</i> , 2019, 92, 2-P-043.	0.0	0
57	1. Trends in Special Imaging Technologies. <i>Kyokai Joho Imeji Zasshi/Journal of the Institute of Image Information and Television Engineers</i> , 2019, 73, 237-242.	0.1	0
58	CMOS-based optical energy harvesting circuit for biomedical and Internet of Things devices. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 04FM05.	1.6	11
59	1 mm <sup>3</sup> -sized optical neural stimulator based on CMOS integrated photovoltaic power receiver. <i>AIP Advances</i> , 2018, 8, .	1.3	50
60	Excitation and Emission Filters for Implantable Fluorescence Imaging Devices by Laser Lift-Off Process. , 2018, , .		0
61	Battery-Free. Sticker-Like, Device for Health Monitoring, Operated by Optical Power Transfer. , 2018, , .		1
62	Performance improvement and in vivo demonstration of a sophisticated retinal stimulator using smart electrodes with built-in CMOS microchips. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 1002B3.	1.6	4
63	Highly sensitive lens-free fluorescence imaging device enabled by a complementary combination of interference and absorption filters. <i>Biomedical Optics Express</i> , 2018, 9, 4329.	3.0	53
64	Compact Lensless Fluorescence Counting System for Single Molecular Assay. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2018, 12, 1177-1185.	4.5	2
65	Live Demonstration: IoT micronode with optical ID transmission capability operated by optical energy harvesting. , 2018, , .		0
66	Functional Validation of Intelligent Retinal Stimulator Using Microchip-embedded Smart Electrode. <i>Sensors and Materials</i> , 2018, , 167.	0.6	4
67	Electrochemical Evaluation of Geometrical Effect and Three-dimensionalized Effect of Iridium Oxide Electrodes Used for Retinal Stimulation. <i>Sensors and Materials</i> , 2018, , 213.	0.6	4
68	Design Optimization of CMOS Control Circuit for Integrated Photovoltaic Power Transfer. <i>Sensors and Materials</i> , 2018, 30, 2343.	0.6	2
69	Implantable optogenetic device with CMOS IC technology for simultaneous optical measurement and stimulation. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 057001.	1.6	7
70	On-chip cell analysis platform: Implementation of contact fluorescence microscopy in microfluidic chips. <i>AIP Advances</i> , 2017, 7, .	1.3	24
71	Implantable Microimaging Device for Observing Brain Activities of Rodents. <i>Proceedings of the IEEE</i> , 2017, 105, 158-166.	26.4	39
72	Fluorescence imaging device with an ultra-thin micro-LED. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
73	Fabrication and in vivo demonstration of microchip-embedded smart electrode device for neural stimulation in retinal prosthesis. , 2017, , .		6
74	CMOS-based opto-electric neural interface devices for optogenetics. , 2017, , .		0
75	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
76	Stimulator Design of Retinal Prosthesis. IEICE Transactions on Electronics, 2017, E100.C, 523-528.	0.6	8
77	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.	1.6	9
78	“Optical communication with brain cells by means of an implanted duplex micro-device with optogenetics and Ca <sup>2+</sup> fluoroimaging” Scientific Reports, 2016, 6, 21247.	3.4	22
79	Hemodynamic imaging using an implantable self-reset image sensor. , 2016, , .		1
80	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.	1.6	20
81	EP-1779: Margins to compensate for deformity of the prostate/seminal vesicle in IGRT using fiducial-markers. Radiotherapy and Oncology, 2016, 119, S834.	0.6	0
82	Implantable imaging device for brain functional imaging system using flavoprotein fluorescence. Japanese Journal of Applied Physics, 2016, 55, 03DF02.	1.6	21
83	An Implantable CMOS Image Sensor With Self-Reset Pixels for Functional Brain Imaging. IEEE Transactions on Electron Devices, 2016, 63, 215-222.	3.2	30
84	Technical Note: Characterization of custom 3D printed multimodality imaging phantoms. Medical Physics, 2015, 42, 5913-5918.	2.9	62
85	Intravital fluorescence imaging of mouse brain using implantable semiconductor devices and epi-illumination of biological tissue. Biomedical Optics Express, 2015, 6, 1553.	3.0	31
86	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
87	Implantable semiconductor imaging devices for in vivo optical imaging of brain. , 2015, , .		0
88	Demonstration of implantable CMOS image sensors for functional brain imaging. , 2014, , .		1
89	An implantable image sensor with self-reset function for brain imaging. , 2014, , .		1
90	An implantable green fluorescence imaging device using absorption filters with high excitation light rejection ratio. , 2014, , .		4

#	ARTICLE	IF	CITATIONS
91	An implantable CMOS device for blood-flow imaging during experiments on freely moving rats. Japanese Journal of Applied Physics, 2014, 53, 04EL05.	1.6	41
92	Functional brain fluorescence plurimetry in rat by implantable concatenated CMOS imaging system. Biosensors and Bioelectronics, 2014, 53, 31-36.	10.4	13
93	Noise performance of an implantable self-reset CMOS image sensor. , 2014, , .		0
94	Implantable CMOS imaging device with absorption filters for green fluorescence imaging. Proceedings of SPIE, 2014, , .	1.0	10
95	Development of a CMOS-based implantable device for wide-area brain functional imaging. , 2012, , .		0
96	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.	10.4	33
97	Preparation, Characterization and Catalytic Performance of La-SO <sub>4</sub> <sup>2-</sup> /SBA-15 in Esterification of Acetic Acid with n-Butanol. Chemical Research in Chinese Universities, 2008, 24, 357-361.	2.7	1
98	PIK3CA mutation is an oncogenic aberration at advanced stages of oral squamous cell carcinoma. Cancer Science, 2006, 97, 1351-1358.	4.0	142
99	Ein Fragebogen zur infertilitÄtsbedingten Belastung andrologischer Patienten. Reproduktionsmedizin, 2002, 18, 327-332.	0.1	8
100	The crystal and molecular structure of hexacyclo[10,3,1,02,10,03,7,06,16,09,14]hexadecane, an ethano-bridged diamantane. Acta Crystallographica Section B: Structural Crystallography and Crystal Chemistry, 1972, 28, 694-699.	0.4	9
101	A flexible retinal device with CMOS smart electrodes fabricated on parylene C thin-film and bioceramic substrate. Japanese Journal of Applied Physics, 0, , .	1.6	0