

# Mako Kamiya

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5072919/publications.pdf>

Version: 2024-02-01

107  
papers

6,912  
citations

81900

39  
h-index

60623

81  
g-index

116  
all docs

116  
docs citations

116  
times ranked

7288  
citing authors

#	ARTICLE	IF	CITATIONS
1	Selective molecular imaging of viable cancer cells with pH-activatable fluorescence probes. <i>Nature Medicine</i> , 2009, 15, 104-109.	30.7	742
2	Evolution of Fluorescein as a Platform for Finely Tunable Fluorescence Probes. <i>Journal of the American Chemical Society</i> , 2005, 127, 4888-4894.	13.7	637
3	Rapid Cancer Detection by Topically Spraying a $\hat{\text{I}}^3$ -Glutamyltranspeptidase-Activated Fluorescent Probe. <i>Science Translational Medicine</i> , 2011, 3, 110ra119.	12.4	404
4	Rational design of reversible fluorescent probes for live-cell imaging and quantification of fast glutathione dynamics. <i>Nature Chemistry</i> , 2017, 9, 279-286.	13.6	398
5	A spontaneously blinking fluorophore based on intramolecular spirocyclization for live-cell super-resolution imaging. <i>Nature Chemistry</i> , 2014, 6, 681-689.	13.6	374
6	Sensitive $\hat{\text{I}}^2$ -galactosidase-targeting fluorescence probe for visualizing small peritoneal metastatic tumours in vivo. <i>Nature Communications</i> , 2015, 6, 6463.	12.8	334
7	Rational Design of Highly Sensitive Fluorescence Probes for Protease and Glycosidase Based on Precisely Controlled Spirocyclization. <i>Journal of the American Chemical Society</i> , 2013, 135, 409-414.	13.7	231
8	$\hat{\text{I}}^2$ -Galactosidase Fluorescence Probe with Improved Cellular Accumulation Based on a Spirocyclized Rhodol Scaffold. <i>Journal of the American Chemical Society</i> , 2011, 133, 12960-12963.	13.7	216
9	Long time-lapse nanoscopy with spontaneously blinking membrane probes. <i>Nature Biotechnology</i> , 2017, 35, 773-780.	17.5	157
10	Systemically Injectable Enzyme-Loaded Polyion Complex Vesicles as In Vivo Nanoreactors Functioning in Tumors. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 560-565.	13.8	149
11	Macrophage extracellular trap formation promoted by platelet activation is a key mediator of rhabdomyolysis-induced acute kidney injury. <i>Nature Medicine</i> , 2018, 24, 232-238.	30.7	139
12	Lactoferrin Suppresses Neutrophil Extracellular Traps Release in Inflammation. <i>EBioMedicine</i> , 2016, 10, 204-215.	6.1	131
13	An Activatable Photosensitizer Targeted to $\hat{\text{I}}^3$ -Glutamyltranspeptidase. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 10418-10422.	13.8	127
14	Detection of <i>LacZ</i> -Positive Cells in Living Tissue with Single-Cell Resolution. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 9620-9624.	13.8	107
15	A Target Cell-Specific Activatable Fluorescence Probe for In vivo Molecular Imaging of Cancer Based on a Self-Quenched Avidin-Rhodamine Conjugate. <i>Cancer Research</i> , 2007, 67, 2791-2799.	0.9	105
16	Design and Synthesis of an Enzyme Activity-Based Labeling Molecule with Fluorescence Spectral Change. <i>Journal of the American Chemical Society</i> , 2006, 128, 15946-15947.	13.7	104
17	Selective Ablation of $\hat{\text{I}}^2$ -Galactosidase-Expressing Cells with a Rationally Designed Activatable Photosensitizer. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6772-6775.	13.8	102
18	Arrayed lipid bilayer chambers allow single-molecule analysis of membrane transporter activity. <i>Nature Communications</i> , 2014, 5, 4519.	12.8	101

#	ARTICLE	IF	CITATIONS
19	Rapid intraoperative visualization of breast lesions with $\gamma$ -glutamyl hydroxymethyl rhodamine green. <i>Scientific Reports</i> , 2015, 5, 12080.	3.3	89
20	Boron Dipyrromethene As a Fluorescent Caging Group for Single-Photon Uncaging with Long-Wavelength Visible Light. <i>ACS Chemical Biology</i> , 2014, 9, 2242-2246.	3.4	87
21	Acidic pH-Activatable Fluorescence Probes for Visualizing Exocytosis Dynamics. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6085-6089.	13.8	82
22	Silicon Rhodamine-Based Near-Infrared Fluorescent Probe for $\gamma$ -Glutamyltransferase. <i>Bioconjugate Chemistry</i> , 2018, 29, 241-244.	3.6	72
23	Fluorescence Detection of Prostate Cancer by an Activatable Fluorescence Probe for PSMA Carboxypeptidase Activity. <i>Journal of the American Chemical Society</i> , 2019, 141, 10409-10416.	13.7	69
24	$\gamma$ -Glutamyltranspeptidase (GGT)-Activatable Fluorescence Probe for Durable Tumor Imaging. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2125-2129.	13.8	69
25	Rapid and sensitive detection of early esophageal squamous cell carcinoma with fluorescence probe targeting dipeptidylpeptidase IV. <i>Scientific Reports</i> , 2016, 6, 26399.	3.3	65
26	Multicolor Activatable Raman Probes for Simultaneous Detection of Plural Enzyme Activities. <i>Journal of the American Chemical Society</i> , 2020, 142, 20701-20707.	13.7	64
27	A Reversible Fluorescent Probe for Real-Time Live-Cell Imaging and Quantification of Endogenous Hydropolysulfides. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9346-9350.	13.8	60
28	In Vivo Spectral Fluorescence Imaging of Submillimeter Peritoneal Cancer Implants Using a Lectin-Targeted Optical Agent. <i>Neoplasia</i> , 2006, 8, 607-612.	5.3	59
29	Development of a Sensitive Bioluminescent Probe for Imaging Highly Reactive Oxygen Species in Living Rats. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14768-14771.	13.8	57
30	IL-1 $\beta$ Induces Pathologically Activated Osteoclasts Bearing Extremely High Levels of Resorbing Activity: A Possible Pathological Subpopulation of Osteoclasts, Accompanied by Suppressed Expression of Kindlin-3 and Talin-1. <i>Journal of Immunology</i> , 2018, 200, 218-228.	0.8	57
31	Establishment of Molecular Design Strategy To Obtain Activatable Fluorescent Probes for Carboxypeptidases. <i>Journal of the American Chemical Society</i> , 2018, 140, 1767-1773.	13.7	55
32	In Vivo Imaging of Intraperitoneally Disseminated Tumors in Model Mice by Using Activatable Fluorescent Small-Molecular Probes for Activity of Cathepsins. <i>Bioconjugate Chemistry</i> , 2014, 25, 1838-1846.	3.6	54
33	A green-light-emitting, spontaneously blinking fluorophore based on intramolecular spirocyclization for dual-colour super-resolution imaging. <i>Chemical Communications</i> , 2018, 54, 102-105.	4.1	54
34	Asymmetric Rhodamine-Based Fluorescent Probe for Multicolour In Vivo Imaging. <i>Chemistry - A European Journal</i> , 2016, 22, 1696-1703.	3.3	51
35	Activatable Photosensitizer for Targeted Ablation of $\alpha$ -Positive Cells with Single-Cell Resolution. <i>ACS Central Science</i> , 2019, 5, 1676-1681.	11.3	50
36	Intraoperative imaging of hepatic cancers using $\gamma$ -glutamyltranspeptidase-specific fluorophore enabling real-time identification and estimation of recurrence. <i>Scientific Reports</i> , 2017, 7, 3542.	3.3	46

#	ARTICLE	IF	CITATIONS
37	Novel Hexosaminidase-Targeting Fluorescence Probe for Visualizing Human Colorectal Cancer. <i>Bioconjugate Chemistry</i> , 2016, 27, 973-981.	3.6	44
38	Quantitating intracellular oxygen tension in vivo by phosphorescence lifetime measurement. <i>Scientific Reports</i> , 2016, 5, 17838.	3.3	43
39	Spontaneously Blinking Fluorophores Based on Nucleophilic Addition/Dissociation of Intracellular Glutathione for Live-Cell Super-resolution Imaging. <i>Journal of the American Chemical Society</i> , 2020, 142, 9625-9633.	13.7	40
40	Red-Shifted Fluorogenic Substrate for Detection of $\alpha$ -Positive Cells in Living Tissue with Single-Cell Resolution. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 15702-15706.	13.8	38
41	A guide to use photocontrollable fluorescent proteins and synthetic smart fluorophores for nanoscopy. <i>Microscopy (Oxford, England)</i> , 2015, 64, 263-277.	1.5	37
42	Photoacoustic Tomography of Human Hepatic Malignancies Using Intraoperative Indocyanine Green Fluorescence Imaging. <i>PLoS ONE</i> , 2014, 9, e112667.	2.5	36
43	Rapid Cancer Fluorescence Imaging Using A $\beta$ -Glutamyltranspeptidase-Specific Probe For Primary Lung Cancer. <i>Translational Oncology</i> , 2016, 9, 203-210.	3.7	33
44	An Activatable Photosensitizer Targeted to $\beta$ -Glutamyltranspeptidase. <i>Angewandte Chemie</i> , 2017, 129, 10554-10558.	2.0	33
45	A Pilot Study of Fluorescent Imaging of Colorectal Tumors Using a $\beta$ -Glutamyl-Transpeptidase-Activatable Fluorescent Probe. <i>Digestion</i> , 2015, 91, 70-76.	2.3	32
46	Rapid and Accurate Visualization of Breast Tumors with a Fluorescent Probe Targeting $\alpha$ -Mannosidase 2C1. <i>ACS Central Science</i> , 2020, 6, 2217-2227.	11.3	30
47	Systemically Injectable Enzyme-Loaded Polyion Complex Vesicles as In Vivo Nanoreactors Functioning in Tumors. <i>Angewandte Chemie</i> , 2016, 128, 570-575.	2.0	28
48	Fluorescent imaging of superficial head and neck squamous cell carcinoma using a $\beta$ -glutamyltranspeptidase-activated targeting agent: a pilot study. <i>BMC Cancer</i> , 2016, 16, 411.	2.6	28
49	Activatable fluorescent probes for hydrolase enzymes based on coumarin-hemicyanine hybrid fluorophores with large Stokes shifts. <i>Chemical Communications</i> , 2020, 56, 5617-5620.	4.1	28
50	Oral cancer intraoperative detection by topically spraying a $\beta$ -glutamyl transpeptidase-activated fluorescent probe. <i>Oral Oncology</i> , 2016, 54, e16-e18.	1.5	26
51	Development of an Activatable Fluorescent Probe for Prostate Cancer Imaging. <i>Bioconjugate Chemistry</i> , 2017, 28, 2069-2076.	3.6	26
52	Pancreatic Compression during Lymph Node Dissection in Laparoscopic Gastrectomy: Possible Cause of Pancreatic Leakage. <i>Journal of Gastric Cancer</i> , 2018, 18, 134.	2.5	26
53	Recent Progress in Small Spirocyclic, Xanthene-Based Fluorescent Probes. <i>Molecules</i> , 2020, 25, 5964.	3.8	26
54	Red Fluorescence Probe Targeted to Dipeptidylpeptidase-IV for Highly Sensitive Detection of Esophageal Cancer. <i>Bioconjugate Chemistry</i> , 2019, 30, 1055-1060.	3.6	25

#	ARTICLE	IF	CITATIONS
55	A highly sensitive, cell-membrane-permeable fluorescent probe for glutathione. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 4363-4366.	2.2	24
56	Design of spontaneously blinking fluorophores for live-cell super-resolution imaging based on quantum-chemical calculations. <i>Chemical Communications</i> , 2020, 56, 13173-13176.	4.1	24
57	Rapid diagnosis of lymph node metastasis in breast cancer using a new fluorescent method with $\beta$ -glutamyl hydroxymethyl rhodamine green. <i>Scientific Reports</i> , 2016, 6, 27525.	3.3	22
58	Covalent Self-Labeling of Tagged Proteins with Chemical Fluorescent Dyes in BY-2 Cells and Arabidopsis Seedlings. <i>Plant Cell</i> , 2020, 32, 3081-3094.	6.6	22
59	A Novel Topical Fluorescent Probe for Detection of Glioblastoma. <i>Clinical Cancer Research</i> , 2021, 27, 3936-3947.	7.0	20
60	Intraoperative Visualization of Pancreatic Juice Leaking From the Pancreatic Stump in a Swine Model. <i>Gastroenterology</i> , 2015, 149, 1334-1336.	1.3	18
61	Rapid and sensitive fluorescent imaging of tiny tumors in vivo and in clinical specimens. <i>Current Opinion in Chemical Biology</i> , 2016, 33, 9-15.	6.1	18
62	Development of enzyme-activated photosensitizer based on intramolecular electron transfer. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010, 20, 4320-4323.	2.2	17
63	Discovery of Cell-Type-Specific and Disease-Related Enzymatic Activity Changes via Global Evaluation of Peptide Metabolism. <i>Journal of the American Chemical Society</i> , 2017, 139, 3465-3472.	13.7	17
64	Factors affecting the uncaging efficiency of 500 nm light-activatable BODIPY caging group. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2018, 28, 1-5.	2.2	17
65	$\beta$ -Galactosidase is a target enzyme for detecting peritoneal metastasis of gastric cancer. <i>Scientific Reports</i> , 2021, 11, 10664.	3.3	17
66	Molecular probes for fluorescence image-guided cancer surgery. <i>Current Opinion in Chemical Biology</i> , 2022, 67, 102112.	6.1	17
67	Molecular design strategy of fluorogenic probes based on quantum chemical prediction of intramolecular spirocyclization. <i>Communications Chemistry</i> , 2020, 3, .	4.5	16
68	Detection of LacZ <sup>+</sup> Positive Cells in Living Tissue with Single Cell Resolution. <i>Angewandte Chemie</i> , 2016, 128, 9772-9776.	2.0	15
69	Rapid detection of metastatic lymph nodes of colorectal cancer with a gamma-glutamyl transpeptidase-activatable fluorescence probe. <i>Scientific Reports</i> , 2018, 8, 17781.	3.3	15
70	Near-infrared imaging in fission yeast using a genetically encoded phycocyanobilin biosynthesis system. <i>Journal of Cell Science</i> , 2021, 134, .	2.0	15
71	Torque Generation Mechanism of F1-ATPase upon NTP Binding. <i>Biophysical Journal</i> , 2014, 107, 156-164.	0.5	14
72	Feasibility of Using an Enzymatically Activatable Fluorescence Probe for the Rapid Evaluation of Pancreatic Tissue Obtained Using Endoscopic Ultrasound-Guided Fine Needle Aspiration: a Pilot Study. <i>Molecular Imaging and Biology</i> , 2016, 18, 463-471.	2.6	14

#	ARTICLE	IF	CITATIONS
73	Development of a fluorescent probe library enabling efficient screening of tumour-imaging probes based on discovery of biomarker enzymatic activities. <i>Chemical Science</i> , 2022, 13, 4474-4481.	7.4	14
74	A novel sialidase-activatable fluorescence probe with improved stability for the sensitive detection of sialidase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2020, 30, 126860.	2.2	13
75	$\beta$ -Glutamyltranspeptidase (GGT)-Activatable Fluorescence Probe for Durable Tumor Imaging. <i>Angewandte Chemie</i> , 2021, 133, 2153-2157.	2.0	13
76	Rapid detection of superficial head and neck squamous cell carcinoma by topically spraying fluorescent probe targeting dipeptidyl peptidase-IV. <i>Head and Neck</i> , 2018, 40, 1466-1475.	2.0	12
77	Detection of early adenocarcinoma of the esophagogastric junction by spraying an enzyme-activatable fluorescent probe targeting Dipeptidyl peptidase-IV. <i>BMC Cancer</i> , 2020, 20, 64.	2.6	12
78	Photoactivatable fluorophores for durable labelling of individual cells. <i>Chemical Communications</i> , 2021, 57, 5802-5805.	4.1	12
79	Rapid detection of papillary thyroid carcinoma by fluorescence imaging using a $\beta$ -glutamyltranspeptidase-specific probe: a pilot study. <i>Thyroid Research</i> , 2018, 11, 16.	1.5	11
80	A novel method for rapid detection of a <i>Helicobacter pylori</i> infection using a $\beta$ -glutamyltranspeptidase-activatable fluorescent probe. <i>Scientific Reports</i> , 2019, 9, 9467.	3.3	11
81	Discovery of an F-actin-binding small molecule serving as a fluorescent probe and a scaffold for functional probes. <i>Science Advances</i> , 2021, 7, eabg8585.	10.3	10
82	Confocal Bioluminescence Imaging for Living Tissues with a Caged Substrate of Luciferin. <i>Analytical Chemistry</i> , 2016, 88, 6231-6238.	6.5	9
83	A Reversible Fluorescent Probe for Real-Time Live-Cell Imaging and Quantification of Endogenous Hydropolysulfides. <i>Angewandte Chemie</i> , 2018, 130, 9490-9494.	2.0	9
84	A novel liver-specific fluorescent anti-cancer drug delivery system using indocyanine green. <i>Scientific Reports</i> , 2019, 9, 3044.	3.3	9
85	Fluorescence Probes for Imaging Basic Carboxypeptidase Activity in Living Cells with High Intracellular Retention. <i>Analytical Chemistry</i> , 2021, 93, 3470-3476.	6.5	9
86	High affinity receptor labeling based on basic leucine zipper domain peptides conjugated with pH-sensitive fluorescent dye: Visualization of AMPA-type glutamate receptor endocytosis in living neurons. <i>Neuropharmacology</i> , 2016, 100, 66-75.	4.1	8
87	A versatile toolbox for investigating biological processes based on quinone methide chemistry: From self-immolative linkers to self-immobilizing agents. <i>Bioorganic and Medicinal Chemistry</i> , 2021, 44, 116281.	3.0	8
88	Red-Shifted Fluorogenic Substrate for Detection of lacZ-Positive Cells in Living Tissue with Single-Cell Resolution. <i>Angewandte Chemie</i> , 2018, 130, 15928-15932.	2.0	7
89	Hybrid cell reactor system from <i>Escherichia coli</i> protoplast cells and arrayed lipid bilayer chamber device. <i>Scientific Reports</i> , 2018, 8, 11757.	3.3	7
90	Cryogenic Fluorescence Localization Microscopy of Spectrally Selected Individual FRET Pairs in a Water Matrix. <i>Journal of Physical Chemistry B</i> , 2018, 122, 6906-6911.	2.6	7

#	ARTICLE	IF	CITATIONS
91	Highly sensitive fluorescence imaging of cancer with avidin-protease probe conjugate. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2019, 29, 126663.	2.2	7
92	Spray Fluorescent Probes for Fluorescence-Guided Neurosurgery. <i>Frontiers in Oncology</i> , 2019, 9, 727.	2.8	7
93	Fluorescence Imaging Using Enzyme-Activatable Probes for Real-Time Identification of Pancreatic Cancer. <i>Frontiers in Oncology</i> , 2021, 11, 714527.	2.8	7
94	Rapid and Sensitive Detection of Cancer Cells with Activatable Fluorescent Probes for Enzyme Activity. <i>Methods in Molecular Biology</i> , 2021, 2274, 193-206.	0.9	6
95	Rapid Visualization of Deeply Located Tumors <i>In Vivo</i> by Intravenous Administration of a $\beta$ -Glutamyltranspeptidase-Activated Fluorescent Probe. <i>Bioconjugate Chemistry</i> , 2022, 33, 523-529.	3.6	6
96	Rapid imaging of lung cancer using a red fluorescent probe to detect dipeptidyl peptidase 4 and puromycin-sensitive aminopeptidase activities. <i>Scientific Reports</i> , 2022, 12, .	3.3	4
97	Companion Diagnosis for Retinal Neuroprotective Treatment by Real-Time Imaging of Calpain Activation Using a Novel Fluorescent Probe. <i>Bioconjugate Chemistry</i> , 2020, 31, 2241-2251.	3.6	3
98	Rapid fluorescence imaging of human hepatocellular carcinoma using the $\beta$ -galactosidase-activatable fluorescence probe SPiDER- $\beta$ Gal. <i>Scientific Reports</i> , 2021, 11, 17946.	3.3	3
99	Rapid visualization of mammary gland tumor lesions of dogs using the enzyme-activated fluorogenic probe; $\beta$ -glutamyl hydroxymethyl rhodamine green. <i>Journal of Veterinary Medical Science</i> , 2022, 84, 593-599.	0.9	3
100	$\beta$ -glutamyl hydroxymethyl rhodamine green fluorescence as a prognostic indicator for lung cancer. <i>General Thoracic and Cardiovascular Surgery</i> , 2020, 68, 1418-1424.	0.9	2
101	Neural and behavioral control in <i>Caenorhabditis elegans</i> by a yellow-light-activatable caged compound. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	2
102	Photoacoustic imaging of small organic molecule-based photoacoustic probe in subcutaneous tumor using P(VDF-TrFE) acoustic sensor. , 2015, , .		1
103	On-Site Monitoring of Postoperative Bile Leakage Using Bilirubin-Inducible Fluorescent Protein. <i>World Journal of Surgery</i> , 2020, 44, 4245-4253.	1.6	1
104	Single-Molecule Localization Microscopy Propelled by Small Organic Fluorophores with Blinking Properties. <i>NeuroMethods</i> , 2020, , 203-227.	0.3	1
105	Development of Spontaneously Blinking Fluorophores for Super-Resolution Imaging. <i>Seibutsu Butsuri</i> , 2015, 55, 031-033.	0.1	0
106	SURG-11. PATHOLOGICAL INVESTIGATION OF NOVEL SPRAY-TYPE FLUORESCENT PROBES FOR BRAIN TUMORS. <i>Neuro-Oncology</i> , 2018, 20, vi252-vi253.	1.2	0
107	BOT-03 INVESTIGATION OF NOVEL SPRAY TYPE FLUORESCENT PROBE FOR GLIOBLASTOMA DETECTION. <i>Neuro-Oncology Advances</i> , 2019, 1, ii12-ii12.	0.7	0