Thomas D Wang

List of Publications by Year
in descending order

112	4,227	109137	123241
papers	citations	35 h-index	61 g-index

114	114	114	4050
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Detection of colonic dysplasia in vivo using a targeted heptapeptide and confocal microendoscopy. Nature Medicine, 2008, 14, 454-458.	15.2	444
2	In vivo imaging using fluorescent antibodies to tumor necrosis factor predicts therapeutic response in Crohn's disease. Nature Medicine, 2014, 20, 313-318.	15.2	349
3	Neonatal acquisition of Clostridia species protects against colonization by bacterial pathogens. Science, 2017, 356, 315-319.	6.0	199
4	Iron Uptake via DMT1 Integrates Cell Cycle with JAK-STAT3 Signaling to Promote Colorectal Tumorigenesis. Cell Metabolism, 2016, 24, 447-461.	7.2	168
5	Targeted Imaging of Esophageal Neoplasia with a Fluorescently Labeled Peptide: First-in-Human Results. Science Translational Medicine, 2013, 5, 184ra61.	5.8	155
6	Dual-axis confocal microscope for high-resolution in vivo imaging. Optics Letters, 2003, 28, 414.	1.7	146
7	Molecular Imaging in Gastrointestinal Endoscopy. Gastroenterology, 2010, 138, 828-833.e1.	0.6	129
8	Functional Imaging of Colonic Mucosa With a Fibered Confocal Microscope for Real-Time In Vivo Pathology. Clinical Gastroenterology and Hepatology, 2007, 5, 1300-1305.	2.4	116
9	Miniature near-infrared dual-axes confocal microscope utilizing a two-dimensional microelectromechanical systems scanner. Optics Letters, 2007, 32, 256.	1.7	101
10	Affinity Peptide for Targeted Detection of Dysplasia in Barrett's Esophagus. Gastroenterology, 2010, 139, 1472-1480.	0.6	92
11	Detection of endogenous biomolecules in Barrett's esophagus by Fourier transform infrared spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15864-15869.	3.3	88
12	Three-dimensional in vivo imaging by a handheld dual-axes confocal microscope. Optics Express, 2008, 16, 7224.	1.7	79
13	Exogenous Molecular Probes for Targeted Imaging in Cancer: Focus on Multi-modal Imaging. Cancers, 2010, 2, 1251-1287.	1.7	76
14	Targeted detection of murine colonic dysplasia in vivo with flexible multispectral scanning fiber endoscopy. Journal of Biomedical Optics, 2012, 17, 021103.	1.4	71
15	Targeted Optical Imaging Agents in Cancer: Focus on Clinical Applications. Contrast Media and Molecular Imaging, 2018, 2018, 1-19.	0.4	69
16	In Vivo Fluorescence-Based Endoscopic Detection of Colon Dysplasia in the Mouse Using a Novel Peptide Probe. PLoS ONE, 2011, 6, e17384.	1.1	66
17	Confocal fluorescence microscope with dual-axis architecture and biaxial postobjective scanning. Journal of Biomedical Optics, 2004, 9, 735.	1.4	64
18	Dual-axes confocal microscopy with post-objective scanning and low-coherence heterodyne detection. Optics Letters, 2003, 28, 1915.	1.7	63

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19	Emerging optical methods for surveillance of Barrett's oesophagus. Gut, 2015, 64, 1816-1823.	6.1	63
20	Large displacement vertical translational actuator based on piezoelectric thin films. Journal of Micromechanics and Microengineering, 2010, 20, 075016.	1.5	61
21	In vivo targeting of colonic dysplasia on fluorescence endoscopy with near-infrared octapeptide. Gut, 2013, 62, 395-403.	6.1	58
22	Osteopontin (OPN/SPP1) isoforms collectively enhance tumor cell invasion and dissemination in esophageal adenocarcinoma. Oncotarget, 2015, 6, 22239-22257.	0.8	56
23	Efficient rejection of scattered light enables deep optical sectioning in turbid media with low-numerical-aperture optics in a dual-axis confocal architecture. Journal of Biomedical Optics, 2008, 13, 034020.	1.4	52
24	Dual-axes confocal reflectance microscope for distinguishing colonic neoplasia. Journal of Biomedical Optics, 2006, 11, 054019.	1.4	51
25	Detection of Sessile Serrated Adenomas in the Proximal Colon Using Wide-Field Fluorescence Endoscopy. Gastroenterology, 2017, 152, 1002-1013.e9.	0.6	49
26	Multimodal endoscope can quantify wide-field fluorescence detection of Barrettâ€™s neoplasia. Endoscopy, 2016, 48, A1-A13.	1.0	48
27	EGFR Overexpressed in Colonic Neoplasia Can be Detected on Wide-Field Endoscopic Imaging. Clinical and Translational Gastroenterology, 2015, 6, e101.	1.3	47
28	Design and Synthesis of Near-Infrared Peptide for in Vivo Molecular Imaging of HER2. Bioconjugate Chemistry, 2016, 27, 481-494.	1.8	46
29	Fibered Confocal Microscopy of Bladder Tumors: An ex Vivo Study. Journal of Endourology, 2009, 23, 197-202.	1.1	44
30	Integrated monolithic 3D MEMS scanner for switchable real time vertical/horizontal cross-sectional imaging. Optics Express, 2016, 24, 2145.	1.7	43
31	Future and advances in endoscopy. Journal of Biophotonics, 2011, 4, 471-481.	1.1	40
32	Molecular endoscopy for targeted imaging in the digestive tract. The Lancet Gastroenterology and Hepatology, 2016, 1, 147-155.	3.7	40
33	Multimodal laser-based angioscopy for structural, chemical and biological imaging of atherosclerosis. Nature Biomedical Engineering, 2017, 1, .	11.6	38
34	Improved rejection of multiply scattered photons in confocal microscopy using dual-axes architecture. Optics Letters, 2007, 32, 1674.	1.7	37
35	Multispectral Endoscopic Imaging of Colorectal Dysplasia In Vivo. Gastroenterology, 2012, 143, 1435-1437.	0.6	37
36	Overexpressed Claudin-1 Can Be Visualized Endoscopically inÂColonic Adenomas InÂVivo. Cellular and Molecular Gastroenterology and Hepatology, 2016, 2, 222-237.	2.3	36

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37	Near-infrared-labeled peptide multimer functions as phage mimic for high affinity, specific targeting of colonic adenomas in vivo (with videos). Gastrointestinal Endoscopy, 2012, 76, 1197-1206.e5.	0.5	35
38	MEMS-based multiphoton endomicroscope for repetitive imaging of mouse colon. Biomedical Optics Express, 2015, 6, 3074.	1.5	35
39	Better health, less spending: Redesigning the transition from pediatric to adult healthcare for youth with chronic illness. Healthcare, 2016, 4, 57-68.	0.6	35
40	Modeling and Simulation of a Parametrically Resonant Micromirror With Duty-Cycled Excitation. Journal of Microelectromechanical Systems, 2014, 23, 1440-1453.	1.7	34
41	Targeted vertical cross-sectional imaging with handheld near-infrared dual axes confocal fluorescence endomicroscope. Biomedical Optics Express, 2013, 4, 322.	1.5	32
42	AGA White Paper: Roadmap for the Future of Colorectal Cancer Screening in the United States. Clinical Gastroenterology and Hepatology, 2020, 18, 2667-2678.e2.	2.4	29
43	In Vivo Molecular Imaging of Barrett's Esophagus With Confocal Laser Endomicroscopy. Gastroenterology, 2013, 145, 56-58.	0.6	27
44	Targeted Endoscopic Imaging. Gastrointestinal Endoscopy Clinics of North America, 2009, 19, 283-298.	0.6	25
45	Multiplexed endoscopic imaging of Barrettâ€™s neoplasia using targeted fluorescent heptapeptides in a phase 1 proof-of-concept study. Gut, 2021, 70, 1010-1013.	6.1	24
46	TGM2: A Cell Surface Marker in Esophageal Adenocarcinomas. Journal of Thoracic Oncology, 2014, 9, 872-881.	0.5	22
47	Vertical Cross-sectional Imaging of Colonic Dysplasia In Vivo With Multi-spectral Dual Axes Confocal Endomicroscopy. Gastroenterology, 2014, 146, 615-617.	0.6	22
48	A CD44 specific peptide developed by phage display for targeting gastric cancer. Biotechnology Letters, 2015, 37, 2311-2320.	1.1	21
49	Use of an endoscope-compatible probe to detect colonic dysplasia with Fourier transform infrared spectroscopy. Journal of Biomedical Optics, 2009, 14, 044006.	1.4	20
50	Use of Appropriate Surveillance for Patients With Nondysplastic Barrettâ€™s Esophagus. Clinical Gastroenterology and Hepatology, 2018, 16, 862-869.e3.	2.4	20
51	A three-degree-of-freedom thin-film PZT-actuated microactuator with large out-of-plane displacement. Journal of Micromechanics and Microengineering, 2014, 24, 075017.	1.5	19
52	Multimodal Video Colonoscope for Targeted Wide-Field Detection of Nonpolypoid Colorectal Neoplasia. Gastroenterology, 2016, 150, 1084-1086.	0.6	18
53	Dual-modal in vivo fluorescence and photoacoustic imaging using a heterodimeric peptide. Chemical Communications, 2018, 54, 13196-13199.	2.2	17
54	Ultra-Compact Microsystems-Based Confocal Endomicroscope. IEEE Transactions on Medical Imaging, 2020, 39, 2406-2414.	5.4	17

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55	Advancing the translation of optical imaging agents for clinical imaging. Biomedical Optics Express, 2013, 4, 160.	1.5	16
56	Emerging trends in endoscopic imaging. Nature Reviews Gastroenterology and Hepatology, 2016, 13, 72-73.	8.2	16
57	An Electrostatic MEMS Translational Scanner with Large Out-of-Plane Stroke for Remote Axial-Scanning in Multi-Photon Microscopy. Micromachines, 2017, 8, 159.	1.4	16
58	Multiplexed Targeting of Barrettâ€™s Neoplasia with a Heterobivalent Ligand: Imaging Study on Mouse Xenograft in Vivo and Human Specimens ex Vivo. Journal of Medicinal Chemistry, 2018, 61, 5323-5331.	2.9	16
59	Targeted therapy of colorectal neoplasia with rapamycin in peptide-labeled pegylated octadecyl lithocholate micelles. Journal of Controlled Release, 2015, 199, 114-121.	4.8	15
60	Identification and validation of FGFR2 peptide for detection of early Barrett's neoplasia. Oncotarget, 2017, 8, 87095-87106.	0.8	15
61	Constitutively Higher Level of GSTT2 in Esophageal Tissues From African Americans Protects Cells Against DNA Damage. Gastroenterology, 2019, 156, 1404-1415.	0.6	15
62	Improved Extended Kalman Filter Estimation Using Threshold Signal Detection With an MEMS Electrostatic Microscanner. IEEE Transactions on Industrial Electronics, 2020, 67, 1328-1336.	5.2	15
63	In vivo photoacoustic tomography of EGFR overexpressed in hepatocellular carcinoma mouse xenograft. Photoacoustics, 2016, 4, 43-54.	4.4	14
64	Visualizing Epithelial Expression in Vertical and Horizontal Planes With Dual Axes Confocal Endomicroscope Using Compact Distal Scanner. IEEE Transactions on Medical Imaging, 2017, 36, 1482-1490.	5.4	14
65	Genomic similarity between gastroesophageal junction and esophageal Barrett's adenocarcinomas. Oncotarget, 2016, 7, 54867-54882.	0.8	14
66	Detection of colonic inflammation with Fourier transform infrared spectroscopy using a flexible silver halide fiber. Biomedical Optics Express, 2010, 1, 1014.	1.5	13
67	Targeted imaging of colorectal dysplasia in living mice with fluorescence microendoscopy. Biomedical Optics Express, 2011, 2, 981.	1.5	13
68	Axial beam scanning in multiphoton microscopy with MEMS-based actuator. Optics Express, 2017, 25, 2195.	1.7	13
69	Sorafenib encapsulated in nanocarrier functionalized with glypican-3 specific peptide for targeted therapy of hepatocellular carcinoma. Colloids and Surfaces B: Biointerfaces, 2019, 184, 110498.	2.5	13
70	Large Stroke Vertical PZT Microactuator With High-Speed Rotational Scanning. Journal of Microelectromechanical Systems, 2014, 23, 256-258.	1.7	12
71	Toward real-time quantification of fluorescence molecular probes using target/background ratio for guiding biopsy and endoscopic therapy of esophageal neoplasia. Journal of Medical Imaging, 2017, 4, 1.	0.8	12
72	Ultrasmall Paramagnetic Iron Oxide Nanoprobe Targeting Epidermal Growth Factor Receptor for In Vivo Magnetic Resonance Imaging of Hepatocellular Carcinoma. Bioconjugate Chemistry, 2017, 28, 2794-2803.	1.8	11

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73	Large-Displacement Vertical Electrostatic Microactuator Dynamics Using Duty-Cycled Softening/Stiffening Parametric Resonance. Journal of Microelectromechanical Systems, 2019, 28, 351-361.	1.7	11
74	Identification of Tumor Specific Peptide as EpCAM Ligand and Its Potential Diagnostic and Therapeutic Clinical Application. Molecular Pharmaceutics, 2019, 16, 2199-2213.	2.3	11
75	Mathematical model of fluorescence endoscopic image formation. Applied Optics, 1998, 37, 8103.	2.1	10
76	Visualizing epithelial expression of EGFR in vivo with distal scanning side-viewing confocal endomicroscope. Scientific Reports, 2016, 6, 37315.	1.6	10
77	In vivo near-infrared imaging of ErbB2 expressing breast tumors with dual-axes confocal endomicroscopy using a targeted peptide. Scientific Reports, 2017, 7, 14404.	1.6	10
78	Three-dimensional side-view endomicroscope for tracking individual cells in vivo. Biomedical Optics Express, 2017, 8, 5533.	1.5	10
79	Detection of colonic neoplasia in vivo using near-infrared-labeled peptide targeting cMet. Scientific Reports, 2019, 9, 17917.	1.6	10
80	Motion Estimation for a Compact Electrostatic Microscanner via Shared Driving and Sensing Electrodes in Endomicroscopy. IEEE/ASME Transactions on Mechatronics, 2020, 25, 661-672.	3.7	10
81	Detection of Barrettâ€™s neoplasia with a near-infrared fluorescent heterodimeric peptide. Endoscopy, 2022, 54, 1198-1204.	1.0	10
82	A CD44-specific peptide, RP-1, exhibits capacities of assisting diagnosis and predicting prognosis of gastric cancer. Oncotarget, 2017, 8, 30063-30076.	0.8	9
83	Image Processing Metrics for Phase Identification of a Multiaxis MEMS Scanner Used in Single Pixel Imaging. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1445-1454.	3.7	8
84	3 degree-of-freedom resonant scanner with full-circumferential range and large out-of-plane displacement. Optics Express, 2019, 27, 16296.	1.7	8
85	Thin Layer-Protected Gold Nanoparticles for Targeted Multimodal Imaging with Photoacoustic and CT. Pharmaceuticals, 2021, 14, 1075.	1.7	8
86	Targeted Imaging of Flat and Depressed Colonic Neoplasms. Gastrointestinal Endoscopy Clinics of North America, 2010, 20, 579-583.	0.6	7
87	Molecular Imaging for Guiding Oncologic Prognosis and Therapy in Esophageal Adenocarcinoma. Hospital Practice (1995), 2011, 39, 97-106.	0.5	7
88	Dynamics of thin-film piezoelectric microactuators with large vertical stroke subject to multi-axis coupling and fabrication asymmetries. Journal of Micromechanics and Microengineering, 2018, 28, 015014.	1.5	7
89	Multimodal Imaging of Growth and Rapamycin-Induced Regression of Colonic Adenomas in Apc Mutation-Dependent Mouse. Translational Oncology, 2012, 5, 313-320.	1.7	6
90	In vivo biomarkers for targeting colorectal neoplasms. Cancer Biomarkers, 2008, 4, 329-340.	0.8	5

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91	Barrett's Esophagus Translational Research Network (BETRNet): The Pivotal Role of Multi-institutional Collaboration in Esophageal Adenocarcinoma Research. Gastroenterology, 2014, 146, 1586-1590.	0.6	5
92	2D resonant microscanner for dual axes confocal fluorescence endomicroscope. , 2014, , .		4
93	Diagnostic and Interventional Optical Angioscopy in Ex Vivo Carotid Arteries. Operative Neurosurgery, 2017, 13, 36-46.	0.4	4
94	Integrated Imaging Methodology Detects Claudin-1 Expression in Premalignant Nonpolypoid and Polypoid Colonic Epithelium in Mice. Clinical and Translational Gastroenterology, 2020, 11, e00089.	1.3	4
95	Membrane Bound Peroxiredoxin-1 Serves as a Biomarker for In Vivo Detection of Sessile Serrated Adenomas. Antioxidants and Redox Signaling, 2022, 36, 39-56.	2.5	4
96	Multi-photon 3D imaging with an electrothermal actuator with low thermal and inertial mass. Sensors and Actuators A: Physical, 2021, 329, 112791.	2.0	4
97	Dynamic imaging of gut functionâ€"allowing the blind to see. Nature Reviews Gastroenterology and Hepatology, 2014, 11, 584-586.	8.2	3
98	Endoscopic Imaging Techniques: Beyond Narrow Band. American Journal of Gastroenterology, 2018, 113, 1103-1107.	0.2	3
99	In Vivo Multi-Spectral Wide-Field Fluorescence Detection of Dysplasia in the Mouse. Gastroenterology, 2011, 140, S-11.	0.6	2
100	Estimating Perturbations to Laser Position on Tissue for Lissajous Scanning in Endomicroscopy*. , 2020, , .		2
101	Fiber optic FTIR instrument for in vivo detection of colonic neoplasia. Proceedings of SPIE, 2009, , .	0.8	1
102	Real-time fluorescence target/background (T/B) ratio calculation in multimodal endoscopy for detecting GI tract cancer. , 2017, , .		1
103	Multi-Modal Imaging Probe for Glypican-3 Overexpressed in Orthotopic Hepatocellular Carcinoma. Journal of Medicinal Chemistry, 2021, 64, 15639-15650.	2.9	1
104	Engineering Miniature Imaging Instruments. , 2014, , 835-852.		1
105	Abstract 107: Laser Angioscopy Reveals Concealed Ulcers in Substenotic Carotid Plaques in Cryptogenic Stroke Patients: A Preclinical Study. Stroke, 2017, 48, .	1.0	1
106	Multi-modal imaging for uptake of peptide ligand specific for CD44 by hepatocellular carcinoma. Photoacoustics, 2022, 26, 100355.	4.4	1
107	Switching on the Light to See More Disease. Gastroenterology, 2010, 138, 2553-2554.	0.6	0
108	Targeted, Multimodality PET-CT and Optical Imaging Platform for Visualizing Biological Function. Gastroenterology, 2010, 139, 1790-1791.	0.6	0

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109	Introduction to the BIOMED 2016 feature issue. Biomedical Optics Express, 2016, 7, 4415.	1.5	0
110	An electrostatic MEMS scanner with in-plane and out-of-plane two-dimensional scanning capability for confocal endoscopic in vivo imaging. , 2017, , .		0
111	Detection of Barrett's Neoplasia with Near-Infrared Fluorescent Heterodimeric Peptide: Feasibility Results from a Phase 1 Study. SSRN Electronic Journal, 0, , .	0.4	0
112	Self-Sensing of Oscillation in Parametrically-Resonant MEMS Mirrors with Uncertain Nonlinear Dynamics. , 2021, , .		0