

Joseph C Liao

List of Publications by Year in descending order

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Version: 2024-02-01

111
papers

4,593
citations

109264

35
h-index

110317

64
g-index

118
all docs

118
docs citations

118
times ranked

6809
citing authors

#	ARTICLE	IF	CITATIONS
1	Organoid Modeling of the Tumor Immune Microenvironment. <i>Cell</i> , 2018, 175, 1972-1988.e16.	13.5	870
2	New and developing diagnostic technologies for urinary tract infections. <i>Nature Reviews Urology</i> , 2017, 14, 296-310.	1.9	195
3	Use of Electrochemical DNA Biosensors for Rapid Molecular Identification of Uropathogens in Clinical Urine Specimens. <i>Journal of Clinical Microbiology</i> , 2006, 44, 561-570.	1.8	184
4	Hedgehog Signaling Restrains Bladder Cancer Progression by Eliciting Stromal Production of Urothelial Differentiation Factors. <i>Cancer Cell</i> , 2014, 26, 521-533.	7.7	164
5	Antimicrobial Susceptibility Testing Using High Surface-to-Volume Ratio Microchannels. <i>Analytical Chemistry</i> , 2010, 82, 1012-1019.	3.2	128
6	Successful Translation of Fluorescence Navigation During Oncologic Surgery: A Consensus Report. <i>Journal of Nuclear Medicine</i> , 2016, 57, 144-150.	2.8	125
7	Endoscopic molecular imaging of human bladder cancer using a CD47 antibody. <i>Science Translational Medicine</i> , 2014, 6, 260ra148.	5.8	124
8	Augmented Bladder Tumor Detection Using Deep Learning. <i>European Urology</i> , 2019, 76, 714-718.	0.9	117
9	Accelerating bacterial growth detection and antimicrobial susceptibility assessment in integrated picoliter droplet platform. <i>Biosensors and Bioelectronics</i> , 2017, 97, 260-266.	5.3	112
10	Adaptable microfluidic system for single-cell pathogen classification and antimicrobial susceptibility testing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 10270-10279.	3.3	101
11	Development of an Advanced Electrochemical DNA Biosensor for Bacterial Pathogen Detection. <i>Journal of Molecular Diagnostics</i> , 2007, 9, 158-168.	1.2	100
12	Single Cell Antimicrobial Susceptibility Testing by Confined Microchannels and Electrokinetic Loading. <i>Analytical Chemistry</i> , 2013, 85, 3971-3976.	3.2	91
13	A Biosensor Platform for Rapid Antimicrobial Susceptibility Testing Directly From Clinical Samples. <i>Journal of Urology</i> , 2011, 185, 148-153.	0.2	90
14	Hybrid electrokinetic manipulation in high-conductivity media. <i>Lab on A Chip</i> , 2011, 11, 1770.	3.1	88
15	Simultaneous transrectal ultrasound and photoacoustic human prostate imaging. <i>Science Translational Medicine</i> , 2019, 11, .	5.8	87
16	Surface-Enhanced Raman Scattering Nanoparticles for Multiplexed Imaging of Bladder Cancer Tissue Permeability and Molecular Phenotype. <i>ACS Nano</i> , 2018, 12, 9669-9679.	7.3	81
17	Blue light cystoscopy for the diagnosis of bladder cancer: Results from the US prospective multicenter registry. <i>Urologic Oncology: Seminars and Original Investigations</i> , 2018, 36, 361.e1-361.e6.	0.8	79
18	System Integration - A Major Step toward Lab on a Chip. <i>Journal of Biological Engineering</i> , 2011, 5, 6.	2.0	76

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19	CD47-Targeted Near-Infrared Photoimmunotherapy for Human Bladder Cancer. <i>Clinical Cancer Research</i> , 2019, 25, 3561-3571.	3.2	70
20	Simple and Precise Counting of Viable Bacteria by Resazurin-Amplified Picoarray Detection. <i>Analytical Chemistry</i> , 2018, 90, 9449-9456.	3.2	65
21	Clinical Validation of Integrated Nucleic Acid and Protein Detection on an Electrochemical Biosensor Array for Urinary Tract Infection Diagnosis. <i>PLoS ONE</i> , 2011, 6, e26846.	1.1	55
22	Multiplex Pathogen Identification for Polymicrobial Urinary Tract Infections Using Biosensor Technology: A Prospective Clinical Study. <i>Journal of Urology</i> , 2009, 182, 2735-2741.	0.2	49
23	Intraoperative Optical Biopsy during Robotic Assisted Radical Prostatectomy Using Confocal Endomicroscopy. <i>Journal of Urology</i> , 2016, 195, 1110-1117.	0.2	48
24	Development of a 90-Minute Integrated Noninvasive Urinary Assay for Bladder Cancer Detection. <i>Journal of Urology</i> , 2018, 199, 655-662.	0.2	48
25	A Cell Phone-Based Microphotometric System for Rapid Antimicrobial Susceptibility Testing. <i>Journal of the Association for Laboratory Automation</i> , 2014, 19, 258-266.	2.8	47
26	Molecular Detection of Bacterial Pathogens Using Microparticle Enhanced Double-Stranded DNA Probes. <i>Analytical Chemistry</i> , 2011, 83, 6349-6354.	3.2	46
27	Rapid, species-specific detection of uropathogen 16S rDNA and rRNA at ambient temperature by dot-blot hybridization and an electrochemical sensor array. <i>Molecular Genetics and Metabolism</i> , 2005, 84, 90-99.	0.5	43
28	Advances in Imaging Technologies in the Evaluation of High-Grade Bladder Cancer. <i>Urologic Clinics of North America</i> , 2015, 42, 147-157.	0.8	41
29	AC Electrokinetics of Physiological Fluids for Biomedical Applications. <i>Journal of the Association for Laboratory Automation</i> , 2015, 20, 611-620.	2.8	40
30	A Pilot Study of <i>In Vivo</i> Confocal Laser Endomicroscopy of Upper Tract Urothelial Carcinoma. <i>Journal of Endourology</i> , 2015, 29, 1418-1423.	1.1	40
31	Three-dimensional, distendable bladder phantom for optical coherence tomography and white light cystoscopy. <i>Journal of Biomedical Optics</i> , 2014, 19, 1.	1.4	39
32	Active Manipulation of Quantum Dots using AC Electrokinetics. <i>Journal of Physical Chemistry C</i> , 2009, 113, 6561-6565.	1.5	37
33	In Situ Electrokinetic Enhancement for Self-Assembled-Monolayer-Based Electrochemical Biosensing. <i>Analytical Chemistry</i> , 2012, 84, 2702-2707.	3.2	37
34	Rapid Antimicrobial Susceptibility Testing with Electrokinetics Enhanced Biosensors for Diagnosis of Acute Bacterial Infections. <i>Annals of Biomedical Engineering</i> , 2014, 42, 2314-2321.	1.3	37
35	Integrated Biosensor Assay for Rapid Uropathogen Identification and Phenotypic Antimicrobial Susceptibility Testing. <i>European Urology Focus</i> , 2017, 3, 293-299.	1.6	37
36	3D reconstruction of cystoscopy videos for comprehensive bladder records. <i>Biomedical Optics Express</i> , 2017, 8, 2106.	1.5	37

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37	Long-range electrothermal fluid motion in microfluidic systems. <i>International Journal of Heat and Mass Transfer</i> , 2016, 98, 341-349.	2.5	36
38	A Multiplex Electrochemical Biosensor for Bloodstream Infection Diagnosis. <i>SLAS Technology</i> , 2017, 22, 466-474.	1.0	34
39	Incidence of Ureteral Strictures After Laparoscopic Donor Nephrectomy. <i>Journal of Urology</i> , 2006, 176, 1065-1068.	0.2	32
40	Deep Sequencing of Urinary RNAs for Bladder Cancer Molecular Diagnostics. <i>Clinical Cancer Research</i> , 2017, 23, 3700-3710.	3.2	29
41	Droplet-Based Single-Cell Measurements of 16S rRNA Enable Integrated Bacteria Identification and Phenotypic Molecular Antimicrobial Susceptibility Testing from Clinical Samples in 30 min. <i>Advanced Science</i> , 2021, 8, 2003419.	5.6	29
42	Image-Guided Transurethral Resection of Bladder Tumors – Current Practice and Future Outlooks. <i>Bladder Cancer</i> , 2017, 3, 149-159.	0.2	27
43	Optimizing peptide nucleic acid probes for hybridization-based detection and identification of bacterial pathogens. <i>Analyst</i> , 2019, 144, 1565-1574.	1.7	27
44	Association of Bowel Rest and Ketorolac Analgesia with Short Hospital Stay After Laparoscopic Donor Nephrectomy. <i>Urology</i> , 2007, 69, 828-831.	0.5	26
45	Electrokinetic stringency control in self-assembled monolayer-based biosensors for multiplex urinary tract infection diagnosis. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014, 10, 159-166.	1.7	26
46	Validation of Confocal Laser Endomicroscopy Features of Bladder Cancer: The Next Step Towards Real-time Histologic Grading. <i>European Urology Focus</i> , 2020, 6, 81-87.	1.6	26
47	SLIPS-LAB – A bioinspired bioanalysis system for metabolic evaluation of urinary stone disease. <i>Science Advances</i> , 2020, 6, eaba8535.	4.7	26
48	Development of a Biosensor-Based Rapid Urine Test for Detection of Urogenital Schistosomiasis. <i>PLoS Neglected Tropical Diseases</i> , 2015, 9, e0003845.	1.3	23
49	Unplanned Emergency Department Visits and Hospital Admissions Following Ureteroscopy: Do Ureteral Stents Make a Difference?. <i>Urology</i> , 2018, 117, 44-49.	0.5	23
50	A Microfluidic Cartridge System for Multiplexed Clinical Analysis. <i>Journal of the Association for Laboratory Automation</i> , 2009, 14, 407-412.	2.8	22
51	Redefining the Stone Belt: Precipitation Is Associated with Increased Risk of Urinary Stone Disease. <i>Journal of Endourology</i> , 2017, 31, 1203-1210.	1.1	21
52	Nanotube assisted microwave electroporation for single cell pathogen identification and antimicrobial susceptibility testing. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2019, 17, 246-253.	1.7	21
53	Development of robust artificial neural networks for prediction of 5-year survival in bladder cancer. <i>Urologic Oncology: Seminars and Original Investigations</i> , 2021, 39, 193.e7-193.e12.	0.8	21
54	Statistical Metamodeling for Revealing Synergistic Antimicrobial Interactions. <i>PLoS ONE</i> , 2010, 5, e15472.	1.1	21

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55	Optical Biopsy of Bladder Cancer Using Crowd-Sourced Assessment. <i>JAMA Surgery</i> , 2016, 151, 90.	2.2	19
56	In vivo biodistribution and toxicity of intravesical administration of quantum dots for optical molecular imaging of bladder cancer. <i>Scientific Reports</i> , 2017, 7, 9309.	1.6	19
57	Current Trends in Artificial Intelligence Application for Endourology and Robotic Surgery. <i>Urologic Clinics of North America</i> , 2021, 48, 151-160.	0.8	19
58	Combating Antimicrobial Resistance via Single-Cell Diagnostic Technologies Powered by Droplet Microfluidics. <i>Accounts of Chemical Research</i> , 2022, 55, 123-133.	7.6	19
59	Fiber-Optic Confocal Laser Endomicroscopy of Small Renal Masses: Toward Real-Time Optical Diagnostic Biopsy. <i>Journal of Urology</i> , 2016, 195, 486-492.	0.2	17
60	A Cascaded Droplet Microfluidic Platform Enables High-Throughput Single Cell Antibiotic Susceptibility Testing at Scale. <i>Small Methods</i> , 2022, 6, e2101254.	4.6	17
61	Diagnosis of Bloodstream Infections: An Evolution of Technologies towards Accurate and Rapid Identification and Antibiotic Susceptibility Testing. <i>Antibiotics</i> , 2022, 11, 511.	1.5	16
62	Robot-Assisted Radical Prostatectomy Associated with Decreased Persistent Postoperative Opioid Use. <i>Journal of Endourology</i> , 2020, 34, 475-481.	1.1	15
63	A Universal Electrode Approach for Automated Electrochemical Molecular Analyses. <i>Journal of Microelectromechanical Systems</i> , 2013, 22, 1126-1132.	1.7	14
64	Multimodal 3D cancer-mimicking optical phantom. <i>Biomedical Optics Express</i> , 2016, 7, 648.	1.5	13
65	Twenty-Four Hour Urine Testing and Prescriptions for Urinary Stone Disease-Related Medications in Veterans. <i>Clinical Journal of the American Society of Nephrology: CJASN</i> , 2019, 14, 1773-1780.	2.2	12
66	Urinary Stone Disease in Pregnancy: A Claims Based Analysis of 1.4 Million Patients. <i>Journal of Urology</i> , 2020, 203, 957-961.	0.2	12
67	Facile syringe filter-enabled bacteria separation, enrichment, and buffer exchange for clinical isolation-free digital detection and characterization of bacterial pathogens in urine. <i>Analyst</i> , The, 2021, 146, 2475-2483.	1.7	11
68	Microelectromechanical systems in urology. <i>Urology</i> , 2003, 61, 883-887.	0.5	10
69	Integrated microfluidic systems for molecular diagnostics: A universal electrode platform for rapid diagnosis of urinary tract infections. <i>IEEE Nanotechnology Magazine</i> , 2013, 7, 31-37.	0.9	10
70	Urinary Stone Disease in Pregnancy: Current Management Practices in a Large National Cohort. <i>Urology</i> , 2020, 142, 60-64.	0.5	10
71	Digital biomarkers in human excreta. <i>Nature Reviews Gastroenterology and Hepatology</i> , 2021, 18, 521-522.	8.2	10
72	A Rapid Single-Cell Antimicrobial Susceptibility Testing Workflow for Bloodstream Infections. <i>Biosensors</i> , 2021, 11, 288.	2.3	10

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73	Smart toilets for monitoring COVID-19 surges: passive diagnostics and public health. <i>Npj Digital Medicine</i> , 2022, 5, 39.	5.7	10
74	Registration of free-hand OCT daughter endoscopy to 3D organ reconstruction. <i>Biomedical Optics Express</i> , 2016, 7, 4995.	1.5	9
75	Prostate Multiparametric Magnetic Resonance Imaging Features Following Partial Gland Cryoablation. <i>Urology</i> , 2020, 138, 98-105.	0.5	9
76	RAPID MULTIPLEX IDENTIFICATION OF PATHOGENS IN POLYMICROBIAL URINARY TRACT INFECTIONS. <i>Journal of Urology</i> , 2008, 179, 82-83.	0.2	8
77	Prevalence of twenty-four hour urine testing in Veterans with urinary stone disease. <i>PLoS ONE</i> , 2019, 14, e0220768.	1.1	8
78	Development and Validation of an Interpretable Artificial Intelligence Model to Predict 10-Year Prostate Cancer Mortality. <i>Cancers</i> , 2021, 13, 3064.	1.7	8
79	Bladder cancer risk stratification using a urinary mRNA biomarker panel – A path towards cystoscopy triaging. <i>Urologic Oncology: Seminars and Original Investigations</i> , 2021, 39, 497.e9-497.e15.	0.8	8
80	Rapid bladder cancer cell detection from clinical urine samples using an ultra-thin silicone membrane. <i>Analyst</i> , 2016, 141, 652-660.	1.7	7
81	Optical and Cross-Sectional Imaging Technologies for Bladder Cancer. <i>Cancer Treatment and Research</i> , 2018, 175, 139-163.	0.2	6
82	Evaluation of Patient Treatment Preferences for 15 to 20mm Kidney Stones: A Conjoint Analysis. <i>Journal of Endourology</i> , 2021, 35, 706-711.	1.1	6
83	A microfluidic system for rapid bacterial pathogen detection. , 2007, , .		3
84	Optical biopsy of penile cancer with in vivo confocal laser endomicroscopy. <i>Urologic Oncology: Seminars and Original Investigations</i> , 2019, 37, 809.e1-809.e8.	0.8	3
85	Postoperative opioid-free ureteroscopy discharge: A quality initiative pilot protocol. <i>Current Urology</i> , 2021, 15, 176-180.	0.4	3
86	Risk of Postpartum Urinary Stone Disease in Women with History of Urinary Stone Disease During Pregnancy. <i>Journal of Endourology</i> , 2022, 36, 138-142.	1.1	3
87	Turning on the Lights: New Technologies in Optical Diagnostics and Therapeutics. <i>Journal of Urology</i> , 2013, 190, 381-382.	0.2	2
88	Optical Biopsy of Peripheral Nerve Using Confocal Laser Endomicroscopy: A New Tool for Nerve Surgeons?. <i>Archives of Plastic Surgery</i> , 2015, 42, 626.	0.4	2
89	Renal Morbidity Following Radical Cystectomy in Patients with Bladder Cancer. <i>European Urology Open Science</i> , 2022, 35, 29-36.	0.2	2
90	MP58-02 OPTICAL BIOPSY OF PROSTATE CANCER THROUGH CONFOCAL LASER ENDOMICROSCOPY. <i>Journal of Urology</i> , 2014, 191, .	0.2	1

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91	PD25-01 MOLECULAR IMAGING OF ORTHOTOPIC MOUSE BLADDER CANCER MODEL USING A CD47 ANTIBODY. Journal of Urology, 2015, 193, .	0.2	1
92	DECREASING UTILIZATION OF LHRH-AGONISTS IN THE UNITED STATES IS INDEPENDENT OF REIMBURSEMENT CHANGES: A MEDICARE AND VETERANS HEALTH ADMINISTRATION CLAIMS ANALYSIS. Journal of Urology, 2009, 181, 77-77.	0.2	0
93	1181 URINARY PROTEOMIC ANALYSIS TO IDENTIFY HOST RESPONSE PROTEINS IN CATHETER-ASSOCIATED URINARY TRACT INFECTION. Journal of Urology, 2011, 185, .	0.2	0
94	Real time diagnosis of bladder cancer with probe-based confocal laser endomicroscopy. , 2011, , .		0
95	Next generation of optical diagnostics for bladder cancer using probe-based confocal laser endomicroscopy. , 2012, , .		0
96	1774 INTEROBSERVER AGREEMENT AND ACCURACY OF CONFOCAL LASER ENDOMICROSCOPY FOR IN VIVO DIAGNOSIS OF BLADDER CANCER. Journal of Urology, 2012, 187, .	0.2	0
97	A universal electrode approach for automated electrochemical detection of bacterial 16S rRNA. , 2012, , .		0
98	Wrinkle cellomics: Screening bladder cancer cells using an ultra-thin silicone membrane. , 2014, , .		0
99	PD15-07 OPTICAL BIOPSY OF SUSPECTED PENILE CANCER USING CONFOCAL LASER ENDOMICROSCOPY: INITIAL FEASIBILITY STUDY. Journal of Urology, 2015, 193, .	0.2	0
100	Multimodal, 3D pathology-mimicking bladder phantom for evaluation of cystoscopic technologies (Conference Presentation). , 2016, , .		0
101	Ultra-thin elastomer membrane array wrinkling for bladder cancer diagnosis. , 2016, , .		0
102	Virtual 3D bladder reconstruction for augmented medical records from white light cystoscopy (Conference Presentation). , 2016, , .		0
103	Editorial Comment. Journal of Urology, 2016, 195, 483-484.	0.2	0
104	Editorial Comment. Journal of Urology, 2016, 195, 1585-1585.	0.2	0
105	Editorial Comment. Journal of Urology, 2016, 195, 1703-1703.	0.2	0
106	Abstract 2233: Phage display selection of cancer-specific peptides on human bladder for molecular imaging of bladder cancer. , 2011, , .		0
107	Abstract 4146: Optical imaging of bladder cancer with cancer-specific molecular contrast agents. , 2011, , .		0
108	Abstract 4595: Molecular imaging of urothelial cancer using EGFR-binding peptides. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
109	Abstract LB-84: Multiplex detection of urinary biomarkers for rapid bladder cancer diagnosis using an automated cartridge-based platform.. , 2013, , .		0
110	Image-guided urologic surgery: intraoperative optical imaging and tissue interrogation (Conference) Tj ETQq0 0 0 rgBT /Overlqck 10 Tf 5		
111	Editorial Comment. Journal of Urology, 2020, 204, 56-56.	0.2	0