Nathaniel M Fried

List of Publications by Year
in descending order

49	1,210	394421	395702
papers	citations	19 h-index	33 g-index

49	49	49	657
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Advances in laser technology and fibre-optic delivery systems in lithotripsy. Nature Reviews Urology, 2018, 15, 563-573.	3.8	124
2	Recent advances in infrared laser lithotripsy [Invited]. Biomedical Optics Express, 2018, 9, 4552.	2.9	102
3	Preclinical comparison of superpulse thulium fiber laser and a holmium:YAG laser for lithotripsy. World Journal of Urology, 2020, 38, 497-503.	2.2	102
4	Noncontact Stimulation of the Cavernous Nerves in the Rat Prostate Using a Tunable-Wavelength Thulium Fiber Laser. Journal of Endourology, 2008, 22, 409-414.	2.1	79
5	Thulium fiber laser lithotripsy in anin vitroureter model. Journal of Biomedical Optics, 2014, 19, 128001.	2.6	73
6	High power holmium:YAG versus thulium fiber laser treatment of kidney stones in dusting mode: ablation rate and fragment size studies. Lasers in Surgery and Medicine, 2019, 51, 522-530.	2.1	72
7	Holmium:YAG (Î»â€‰=â€‰2,120â€‰nm) versus thulium fiber (Î»â€‰=â€‰1,908â€‰nm) laser lithotripsy. Lasers in Surgery and Medicine, 2010, 42, 232-236.	2.1	69
8	Analysis of thulium fiber laser induced bubble dynamics for ablation of kidney stones. Journal of Biophotonics, 2017, 10, 1240-1249.	2.3	52
9	Imaging the cavernous nerves in the rat prostate using optical coherence tomography. Lasers in Surgery and Medicine, 2007, 39, 36-41.	2.1	48
10	Thulium fiber laser lithotripsy using tapered fibers. Lasers in Surgery and Medicine, 2010, 42, 45-50.	2.1	35
11	Identification and Imaging of the Nerves Responsible for Erectile Function in Rat Prostate,In Vivo, Using Optical Nerve Stimulation and Optical Coherence Tomography. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1641-1645.	2.9	33
12	Rapid sealing and cutting of porcine blood vessels,ex vivo, using a high-power, 1470-nm diode laser. Journal of Biomedical Optics, 2014, 19, 038002.	2.6	29
13	Fiber optic muzzle brake tip for reducing fiber burnback and stone retropulsion during thulium fiber laser lithotripsy. Journal of Biomedical Optics, 2017, 22, 018001.	2.6	29
14	Infrared laser thermal fusion of blood vessels: preliminaryex vivotissue studies. Journal of Biomedical Optics, 2013, 18, 058001.	2.6	28
15	Detachable microsphere scalpel tips for potential use in ophthalmic surgery with the erbium:YAG laser. Journal of Biomedical Optics, 2014, 19, 018003.	2.6	25
16	Collateral damage to the ureter and Nitinol stone baskets during thulium fiber laser lithotripsy. Lasers in Surgery and Medicine, 2015, 47, 403-410.	2.1	23
17	Laser stimulation of the cavernous nerves in the rat prostate, in vivo: Optimization of wavelength, pulse energy, and pulse repetition rate. , 2008, 2008, 2777-80.		21
18	Rapid sealing of porcine renal blood vessels, ex vivo, using a high power, 1470-nm laser, and laparoscopic prototype. Journal of Biomedical Optics, 2017, 22, 058002.	2.6	21

#	Article	IF	Citations
19	Infrared laser sealing of porcine vascular tissues using a 1,470â€‰nm diode laser: Preliminary in vivo studies. Lasers in Surgery and Medicine, 2017, 49, 366-371.	2.1	21
20	A Miniaturized, 1.9F Integrated Optical Fiber and Stone Basket for Use in Thulium Fiber Laser Lithotripsy. Journal of Endourology, 2015, 29, 1110-1114.	2.1	20
21	New laser treatment approaches for benign prostatic hyperplasia. Current Urology Reports, 2007, 8, 47-52.	2.2	19
22	Miniature ball-tip optical fibers for use in thulium fiber laser ablation of kidney stones. Journal of Biomedical Optics, 2016, 21, 018003.	2.6	19
23	Subsurface nearâ€infrared laser stimulation of the periprostatic cavernous nerves. Journal of Biophotonics, 2012, 5, 793-800.	2.3	18
24	Novel methods for mapping the cavernous nerves during radical prostatectomy. Nature Reviews Urology, 2015, 12, 451-460.	3.8	18
25	Mid-IR Germanium Oxide Fibers for Contact Erbium Laser Tissue Ablation in Endoscopic Surgery. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1709-1714.	2.9	16
26	Thulium fiber laser ablation of kidney stones using an automated, vibrating fiber. Journal of Biomedical Optics, 2019, 24, 1.	2.6	16
27	Computer simulations of thermal tissue remodeling during transvaginal and transurethral laser treatment of female stress urinary incontinence. Lasers in Surgery and Medicine, 2017, 49, 198-205.	2.1	13
28	Microscopic analysis of laser-induced proximal fiber tip damage during holmium:YAG and thulium fiber laser lithotripsy. Optical Engineering, 2016, 55, 046102.	1.0	12
29	Noninvasive laser vasectomy: Preliminary ex vivo tissue studies. Lasers in Surgery and Medicine, 2009, 41, 203-207.	2.1	8
30	Infrared Laser Nerve Stimulation as a Potential Diagnostic Method for Intra-Operative Identification and Preservation of the Prostate Cavernous Nerves. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 299-306.	2.9	8
31	Computational Simulations for Infrared Laser Sealing and Cutting of Blood Vessels. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-8.	2.9	8
32	Optical clearing of vaginal tissues, ex vivo, for minimally invasive laser treatment of female stress urinary incontinence. Journal of Biomedical Optics, 2017, 22, 018002.	2.6	7
33	Comparison of fiber-optic linear beam shaping designs for laparoscopic laser sealing of vascular tissues. Optical Engineering, 2022, 61, .	1.0	6
34	High-frequency ultrasound imaging of noninvasive laser coagulation of the canine vas deferens. Lasers in Surgery and Medicine, 2011, 43, 838-842.	2.1	4
35	Selective laser vaporization of polypropylene mesh used in treatment of female stress urinary incontinence and pelvic organ prolapse: Preliminary studies using a red diode laser. Lasers in Surgery and Medicine, 2012, 44, 325-329.	2.1	4
36	Comparison of four lasers (Î» = 650, 808, 980, and 1075 nm) for noninvasive creation of deep subsurface lesions in tissue. Proceedings of SPIE, 2015, 9542, .	0.8	4

#	Article	IF	Citations
37	Laser treatment of female stress urinary incontinence: optical, thermal, and tissue damage simulations. , 2016, 9689, .		4
38	Nondestructive optical feedback systems for use during infrared laser sealing of blood vessels. Lasers in Surgery and Medicine, 2022, 54, 875-882.	2.1	4
39	Dynamic properties of surfactant-enhanced laser-induced vapor bubbles for lithotripsy applications. Journal of Biomedical Optics, 2021, 26, .	2.6	3
40	Thulium fiber laser-induced vapor bubble dynamics using bare, tapered, ball, hollow steel, and muzzle brake fiber optic tips. Optical Engineering, 2018, 57, 1.	1.0	3
41	Noninvasive laser coagulation of the human vas deferens: Optical and thermal simulations. Lasers in Surgery and Medicine, 2011, 43, 443-449.	2.1	2
42	Thulium fiber laser recanalization of occluded ventricular catheters in an ex vivo tissue model. Journal of Biomedical Optics, 2017, 22, 048001.	2.6	2
43	Sealing and bisection of blood vessels using a 1470 nm laser: optical, thermal, and tissue damage simulations. , 2021, 11621, .		2
44	Optical transmission feedback for infrared laser sealing of blood vessels. , 2021, , .		2
45	Optical coherence tomography for use in infrared laser sealing of blood vessels. , 2020, 2020, .		1
46	LASER PROBE WITH INTEGRATED CONTACT COOLING FOR SUBSURFACE TISSUE THERMAL REMODELING. Journal of the Mississippi Academy of Sciences Mississippi Academy of Sciences, 2018, 63, 202-205.	1.0	1
47	Diffusing, side-firing, and radial delivery laser balloon catheters for creating subsurface thermal lesions in tissue. Proceedings of SPIE, 2016, 9689, .	0.8	0
48	Simulations and testing of the mechanical properties of small core optical fibers for ureteroscopy. Optical Engineering, 2021, 60, .	1.0	0
49	Optical clearing of vaginal tissues in cadavers. , 2018, 10468, .		0