Benjamin A Rockwell

List of Publications by Citations

52 papers	1,097 citations	16 h-index	32 g-index
55 ext. papers	1,277 ext. citations	3.5 avg, IF	3.56 L-index

#	Paper	IF	Citations
52	Laser-induced breakdown in aqueous media. *Progress in Quantum Electronics*, **1997**, 21, 155-248	9.1	235
51	Influence of pulse duration on mechanical effects after laser-induced breakdown in water. *Journal of Applied Physics*, **1998**, 83, 7488-7495	2.5	150
50	Bright emission from a random Raman laser. *Nature Communications*, **2014**, 5, 4356	17.4	73
49	Shielding properties of laser-induced breakdown in water for pulse durations from 5 ns to 125 fs. *Applied Optics*, **1997**, 36, 5630-40	1.7	71
48	Stimulated Raman scattering using a single femtosecond oscillator with flexibility for imaging and spectral applications. *Optics Express*, **2011**, 19, 18885-92	3.3	52
47	Single-shot stand-off chemical identification of powders using random Raman lasing. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 12320-4	11.5	51
46	Influence of optical aberrations on laser-induced plasma formation in water and their consequences for intraocular photodisruption. *Applied Optics*, **1999**, 38, 3636-43	1.7	35
45	Retinal damage and laser-induced breakdown produced by ultrashort-pulse lasers. *Graefes Archive for Clinical and Experimental Ophthalmology*, **1996**, 234 Suppl 1, S28-37	3.8	33
44	Damage Thresholds for Exposure to NIR and Blue Lasers in an In Vitro RPE Cell System. *Investigative Ophthalmology and Visual Science*, **2006**, 47, 3065-73		29
43	Nonlinear refraction in vitreous humor. *Optics Letters*, **1993**, 18, 1792-4	3	27
42	Ultrashort laser pulse retinal damage mechanisms and their impact on thresholds. *Medical Laser Application: International Journal for Laser Treatment and Research*, **2010**, 25, 84-92		25
41	Measuring the absorption coefficient of biological materials using integrating cavity ring-down spectroscopy. *Optica*, **2015**, 2, 162	8.6	21
40	Intraocular laser surgical probe for membrane disruption by laser-induced breakdown. *Applied Optics*, **1997**, 36, 1684-93	1.7	20
39	A procedure for multiple-pulse maximum permissible exposure determination under the Z136.1-2000 American National Standard for Safe Use of Lasers. *Journal of Laser Applications*, **2001**, 13, 134-140	2.1	20
38	A narrow-band speckle-free light source via random Raman lasing. *Journal of Modern Optics*, **2016**, 63, 46-49	1.1	19
37	Spectrally resolved white-light interferometry for measurement of ocular dispersion. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **1999**, 16, 2092-102	1.8	17
36	Ultrashort laser pulse bioeffects and safety. *Journal of Laser Applications*, **1999**, 11, 42-4	2.1	16

35	Monitoring stimulated Raman scattering with photoacoustic detection. *Optics Letters*, **2011**, 36, 1233-5	3	15
34	Thresholds for retinal injury from multiple near-infrared ultrashort laser pulses. *Health Physics*, **2002**, 82, 855-62	2.3	15
33	A comparative study of retinal effects from continuous wave and femtosecond mode-locked lasers. *Lasers in Surgery and Medicine*, **2002**, 31, 9-17	3.6	14
32	Sub-50-fs laser retinal damage thresholds in primate eyes with group velocity dispersion, self-focusing and low-density plasmas. *Graefes Archive for Clinical and Experimental Ophthalmology*, **2005**, 243, 101-12	3.8	13
31	Z-scan measurements of water from 1150 to 1400 nm. *Optics Letters*, **2018**, 43, 4196-4199	3	11
30	Visible lesion threshold dependence on retinal spot size for femtosecond laser pulses. *Journal of Laser Applications*, **2001**, 13, 125-131	2.1	11
29	Update on ANSI Z136.1. *Journal of Laser Applications*, **1999**, 11, 243-247	2.1	11
28	Trends in melanosome microcavitation thresholds for nanosecond pulse exposures in the near infrared. *Journal of Biomedical Optics*, **2014**, 19, 35003	3.5	10
27	ED50 study of femtosecond terawatt laser pulses on porcine skin. *Lasers in Surgery and Medicine*, **2005**, 37, 59-63	3.6	10
26	Comparison of macular versus paramacular retinal sensitivity to femtosecond laser pulses. *Journal of Biomedical Optics*, **2000**, 5, 315-20	3.5	9
25	Enabling time resolved microscopy with random Raman lasing. *Scientific Reports*, **2017**, 7, 44572	4.9	8
24	Comparative study of laser damage threshold energies in the artificial retina. *Journal of Biomedical Optics*, **1999**, 4, 337-44	3.5	8
23	No effect of femtosecond laser pulses on M13, E. coli, DNA, or protein. *Journal of Biomedical Optics*, **2014**, 19, 15008	3.5	7
22	Retinal spot size with wavelength **1997**, 2975, 148		7
21	High-resolution in vivo imaging of regimes of laser damage to the primate retina. *Journal of Ophthalmology*, **2014**, 2014, 516854	2	6
20	Evidence of Anderson localization effects in random Raman lasing **2016**,		4
19	Hyperthermia sensitizes pigmented cells to laser damage without changing threshold damage temperature. *Journal of Biomedical Optics*, **2013**, 18, 110501	3.5	4
18	Detecting mineral content in turbid medium using nonlinear Raman imaging: feasibility study. *Journal of Modern Optics*, **2011**, 58, 1914-1921	1.1	4

17	Chemically Specific Imaging Through Stimulated Raman Photoexcitation and Ultrasound Detection: Minireview. *Australian Journal of Chemistry*, **2012**, 65, 260-265	1.2	4
16	Shock wave and cavitation bubble measurements of ultrashort-pulse laser-induced breakdown in water **1996**,		4
15	Procedure for the computation of hazards from diffusely scattering surfaces under the Z136.1-2000 American National Standard for Safe Use of Lasers. *Journal of Laser Applications*, **2007**, 19, 46-54	2.1	4
14	Temperature dependence of nanosecond laser pulse thresholds of melanosome and microsphere microcavitation. *Journal of Biomedical Optics*, **2016**, 21, 15013	3.5	3
13	Laser bioeffects associated with ultrafast lasers: Role of multiphoton absorption. *Journal of Laser Applications*, **2008**, 20, 89-97	2.1	3
12	Cavitation thresholds in the rabbit retinal pigmented epithelium **1999**, 3601, 27		3
11	Thermal evaluation of laser exposures in an in vitro retinal model by microthermal sensing. *Journal of Biomedical Optics*, **2014**, 19, 97003	3.5	2
10	Comparison of retinal damage thresholds of laser pulses in the macula/paramacula regions of the live eye **1999**, 3601, 39		2
9	Histopathology of ultrashort pulsed laser retinal damage: changing retinal pathology with variation in spot size for near-infrared laser lesions **1999**, 3601, 32		2
8	Effects of laser-induced breakdown, self-focusing, and plasma shielding on ultrashort-pulse propagation in the eye **1996**,		2
7	Effect of ambient temperature and intracellular pigmentation on photothermal damage rate kinetics. *Journal of Biomedical Optics*, **2019**, 24, 1-15	3.5	2
6	Temperature dependence of melanosome microcavitation thresholds produced by single nanosecond laser pulses **2015**,		1
5	Femtosecond laser pulses in the near-infrared produce visible lesions in the primate eye **1998**, 3195, 121		1
4	Nonlinear optical properties of water from 1150 nm to 1400 nm **2019**,		1
3	Non-linear optical hazards from near-infrared ultrafast laser pulses in ocular tissue **2019**,		1
2	Computational modeling and damage threshold prediction of continuous-wave and multiple-pulse porcine skin laser exposures at 1070 nm. *Journal of Laser Applications*, **2021**, 33, 022023	2.1	
1	Evaluation of the potential eye hazard at visible wavelengths of the supercontinuum generated by an ultrafast NIR laser in water. *Biomedical Optics Express*, **2021**, 12, 1167-1180	3.5	