

# David J Spence

## List of Publications by Year in descending order

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141  
papers

3,236  
citations

159525

30  
h-index

168321

53  
g-index

143  
all docs

143  
docs citations

143  
times ranked

1722  
citing authors

#	ARTICLE	IF	CITATIONS
1	Slit beam shaping method for femtosecond laser direct-write fabrication of symmetric waveguides in bulk glasses. <i>Optics Express</i> , 2005, 13, 5676.	1.7	293
2	Guiding of High-Intensity Laser Pulses with a Hydrogen-Filled Capillary Discharge Waveguide. <i>Physical Review Letters</i> , 2002, 89, 185003.	2.9	204
3	Investigation of a hydrogen plasma waveguide. <i>Physical Review E</i> , 2000, 63, 015401.	0.8	175
4	Simulations of a hydrogen-filled capillary discharge waveguide. <i>Physical Review E</i> , 2001, 65, 016407.	0.8	163
5	Wavelength-versatile visible and UV sources based on crystalline Raman lasers. <i>Progress in Quantum Electronics</i> , 2008, 32, 121-158.	3.5	153
6	Continuous-wave, intracavity doubled, self-Raman laser operation in Nd:GdVO <sub>4</sub> at 586.5 nm. <i>Optics Express</i> , 2007, 15, 7038.	1.7	126
7	A wavelength-versatile, continuous-wave, self-Raman solid-state laser operating in the visible. <i>Optics Express</i> , 2010, 18, 20013.	1.7	89
8	Deep ultraviolet diamond Raman laser. <i>Optics Express</i> , 2011, 19, 10857.	1.7	83
9	Demonstration of a Collisionally Excited Optical-Field-Ionization XUV Laser Driven in a Plasma Waveguide. <i>Physical Review Letters</i> , 2003, 91, 205001.	2.9	74
10	Efficient 53 W cw laser at 559 nm by intracavity frequency summation of fundamental and first-Stokes wavelengths in a self-Raman Nd:GdVO <sub>4</sub> laser. <i>Optics Letters</i> , 2010, 35, 682.	1.7	63
11	Mode-locked picosecond diamond Raman laser. <i>Optics Letters</i> , 2010, 35, 556.	1.7	62
12	Highly efficient picosecond diamond Raman laser at 1240 and 1485 nm. <i>Optics Express</i> , 2014, 22, 3325.	1.7	60
13	High Power Diamond Raman Lasers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2018, 24, 1-14.	1.9	59
14	Intrinsically stable high-power single longitudinal mode laser using spatial hole burning free gain. <i>Optica</i> , 2016, 3, 876.	4.8	58
15	Modeling of Continuous Wave Intracavity Raman Lasers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2007, 13, 756-763.	1.9	52
16	Spectral effects of stimulated Raman scattering in crystals. <i>Progress in Quantum Electronics</i> , 2017, 51, 1-45.	3.5	51
17	Synchronously pumped continuous-wave mode-locked yellow Raman laser at 559 nm. <i>Optics Express</i> , 2009, 17, 569.	1.7	50
18	Two-color multiphoton in vivo imaging with a femtosecond diamond Raman laser. <i>Light: Science and Applications</i> , 2017, 6, e17095-e17095.	7.7	44

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19	First demonstration of guiding of high-intensity laser pulses in a hydrogen-filled capillary discharge waveguide. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2001, 34, 4103-4112.	0.6	43
20	Spectral broadening in continuous-wave intracavity Raman lasers. <i>Optics Express</i> , 2014, 22, 7492.	1.7	43
21	Single-frequency 620-nm diamond laser at high power, stabilized via harmonic self-suppression and spatial-hole-burning-free gain. <i>Optics Letters</i> , 2019, 44, 839.	1.7	42
22	Diamond sodium guide star laser. <i>Optics Letters</i> , 2020, 45, 1898.	1.7	41
23	Stimulated polariton scattering in an intracavity RbTiOPO <sub>4</sub> crystal generating frequency-tunable THz output. <i>Optics Express</i> , 2016, 24, 10254.	1.7	38
24	A single-frequency intracavity Raman laser. <i>Optics Express</i> , 2019, 27, 8540.	1.7	38
25	Modelling and optimization of continuous-wave external cavity Raman lasers. <i>Optics Express</i> , 2015, 23, 8590.	1.7	37
26	High-power continuous-wave Raman frequency conversion from 106 Åµm to 149 Åµm in diamond. <i>Optics Express</i> , 2017, 25, 749.	1.7	36
27	All-solid-state parametric Raman anti-Stokes laser at 508 nm. <i>Optics Express</i> , 2009, 17, 810.	1.7	34
28	Multi-wavelength, all-solid-state, continuous wave mode locked picosecond Raman laser. <i>Optics Express</i> , 2010, 18, 5289.	1.7	34
29	Efficient diamond Raman laser generating 65 fs pulses. <i>Optics Express</i> , 2015, 23, 15504.	1.7	33
30	Wavelength tuning and power enhancement of an intracavity Nd:GdVO <sub>4</sub> -BaWO <sub>4</sub> Raman laser using an etalon. <i>Optics Express</i> , 2018, 26, 32145.	1.7	33
31	Laser-based volumetric colour-coded three-dimensional particle velocimetry. <i>Optics and Lasers in Engineering</i> , 2007, 45, 882-889.	2.0	32
32	Miniature wavelength-selectable Raman laser: new insights for optimizing performance. <i>Optics Express</i> , 2011, 19, 25623.	1.7	29
33	302 W quasi-continuous cascaded diamond Raman laser at 15 microns with large brightness enhancement. <i>Optics Express</i> , 2018, 26, 19797.	1.7	29
34	Measurement of the electron-density profile in a discharge-ablated capillary waveguide. <i>Optics Letters</i> , 1999, 24, 993.	1.7	28
35	Pulse compression in synchronously pumped mode locked Raman lasers. <i>Optics Express</i> , 2010, 18, 20422.	1.7	28
36	12-W quasi-steady-state diamond Raman laser pumped by an M <sup>2</sup> = 1.5 beam. <i>Optics Letters</i> , 2019, 44, 2506.	1.7	28

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37	Characteristics of 2-photon ultraviolet laser etching of diamond. <i>Optical Materials Express</i> , 2011, 1, 576.	1.6	27
38	Spatial and Spectral Effects in Continuous-Wave Intracavity Raman Lasers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2015, 21, 134-141.	1.9	27
39	Dramatic enhancement of xuv laser output using a multimode gas-filled capillary waveguide. <i>Physical Review A</i> , 2005, 71, .	1.0	26
40	Mode-locked deep ultraviolet Ce:LiCAF laser. <i>Optics Letters</i> , 2009, 34, 1660.	1.7	26
41	THz polariton laser using an intracavity Mg:LiNbO <sub>3</sub> crystal with protective Teflon coating. <i>Optics Express</i> , 2017, 25, 3991.	1.7	26
42	Ti:sapphire-pumped diamond Raman laser with sub-100-fs pulse duration. <i>Optics Letters</i> , 2014, 39, 2975.	1.7	25
43	Molecular-dynamic calculation of the inverse-bremsstrahlung heating of non-weakly-coupled plasmas. <i>Physical Review E</i> , 2004, 70, 056411.	0.8	23
44	Pump-Probe Measurements of the Raman Gain Coefficient in Crystals Using Multi-Longitudinal-Mode Beams. <i>IEEE Journal of Quantum Electronics</i> , 2015, 51, 1-8.	1.0	23
45	Single-longitudinal-mode ring diamond Raman laser. <i>Optics Letters</i> , 2017, 42, 1229.	1.7	23
46	Low-threshold miniature Ce:LiCAF lasers. <i>Optics Communications</i> , 2006, 262, 238-240.	1.0	22
47	Compact integrated actively Q-switched waveguide laser. <i>Optics Express</i> , 2017, 25, 1692.	1.7	22
48	255-fs dissipative soliton diamond Raman laser. <i>Optics Letters</i> , 2016, 41, 1861.	1.7	21
49	Continuously tunable diamond Raman laser for resonance laser ionization. <i>Optics Letters</i> , 2019, 44, 3924.	1.7	19
50	Tunable continuous-wave deep-ultraviolet laser based on Ce:LiCAF. <i>Optics Letters</i> , 2014, 39, 1306.	1.7	16
51	Tunable 3-6 THz Polariton Laser Exceeding 0.1 mW Average Output Power Based on Crystalline RbTiOPO <sub>4</sub> . <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2018, 24, 1-6.	1.9	16
52	Scaling Q-switched microchip lasers for shortest pulses. <i>Applied Physics B: Lasers and Optics</i> , 2012, 109, 81-88.	1.1	15
53	Multiwavelength ultrafast LiNbO <sub>3</sub> Raman laser. <i>Optics Express</i> , 2015, 23, 25582.	1.7	15
54	Single-longitudinal-mode diamond laser stabilization using polarization-dependent Raman gain. <i>OSA Continuum</i> , 2019, 2, 1028.	1.8	15

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55	Broadly tunable linewidth-invariant Raman Stokes comb for selective resonance photoionization. Optics Express, 2020, 28, 8589.	1.7	14
56	Analysis of a thermal lens in a diamond Raman laser operating at 1.1 kW output power. Optics Express, 2020, 28, 15232.	1.7	14
57	Spectral synthesis of multimode lasers to the Fourier limit in integrated Fabry-Perot diamond resonators. Optica, 2022, 9, 317.	4.8	14
58	Tunable THz polariton laser based on 1342-nm wavelength for enhanced terahertz wave extraction. Optics Letters, 2017, 42, 2691.	1.7	13
59	Investigating single-longitudinal-mode operation of a continuous wave second Stokes diamond Raman ring laser. Optics Express, 2020, 28, 1738.	1.7	13
60	41.8-nm laser driven in a plasma waveguide. Physical Review A, 2004, 70, .	1.0	12
61	Continuous-wave VECSEL Raman laser with tunable lime-yellow-orange output. Optics Express, 2012, 20, 5219.	1.7	12
62	Investigation of blue emission from Raman-active crystals: Its origin and impact on laser performance. Optical Materials Express, 2014, 4, 889.	1.6	12
63	Diamond-based concept for combining beams at very high average powers. Laser and Photonics Reviews, 2017, 11, 1600130.	4.4	12
64	Study of relaxation oscillations in continuous-wave intracavity Raman lasers. Optics Express, 2010, 18, 11530.	1.7	11
65	Managing SRS competition in a miniature visible Nd:YVO <sub>4</sub> /BaWO <sub>4</sub> Raman laser. Optics Express, 2012, 20, 19305.	1.7	11
66	Control of cascading in multiple-order Raman lasers. Optics Letters, 2012, 37, 3840.	1.7	11
67	SRS in the strong-focusing regime for Raman amplifiers. Optics Express, 2015, 23, 15012.	1.7	11
68	Terahertz sources based on stimulated polariton scattering. Progress in Quantum Electronics, 2020, 71, 100254.	3.5	11
69	Ultrafast second-Stokes diamond Raman laser. Optics Express, 2016, 24, 8149.	1.7	10
70	Diamond Raman laser and Yb fiber amplifier for in vivo multiphoton fluorescence microscopy. Biomedical Optics Express, 2022, 13, 1888.	1.5	10
71	Mode locking using stimulated Raman scattering. Optics Express, 2007, 15, 8170.	1.7	9
72	Modeling of wavelength-selectable visible Raman lasers. Optics Communications, 2012, 285, 3849-3854.	1.0	9

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73	Analytic theory for lasers based on stimulated polariton scattering. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 1706.	0.9	9
74	Progress in optical-field-ionization soft X-ray lasers at LOA. Laser and Particle Beams, 2005, 23, .	0.4	7
75	Broadly tunable ultraviolet miniature cerium-doped LiLuF lasers. Optics Express, 2008, 16, 2226.	1.7	7
76	An investigation into Raman mode locking of fiber lasers. Optics Express, 2008, 16, 5277.	1.7	7
77	Asynchronous cross-correlation for weak ultrafast deep ultraviolet laser pulses. Applied Physics B: Lasers and Optics, 2009, 97, 759-763.	1.1	7
78	Tunable terahertz generation in the picosecond regime from the stimulated polariton scattering in a LiNbO <sub>3</sub> crystal. Optics Letters, 2016, 41, 4409.	1.7	7
79	Simulations of recombination lasing in Ar <sup>7+</sup> driven by optical field ionization in a capillary discharge waveguide. Optics Communications, 2005, 249, 501-513.	1.0	6
80	Two-Color, Two-Photon Imaging at Long Excitation Wavelengths Using a Diamond Raman Laser. Microscopy and Microanalysis, 2016, 22, 803-807.	0.2	6
81	Absorptive laser threshold magnetometry: combining visible diamond Raman lasers and nitrogen-vacancy centres. Materials for Quantum Technology, 2021, 1, 025003.	1.2	6
82	Intracavity THz Polariton Source Using a Shallow-Bounce Configuration. IEEE Transactions on Terahertz Science and Technology, 2019, 9, 237-242.	2.0	5
83	Generalised theory of polarisation modes for resonators containing birefringence and anisotropic gain. Optics Express, 2019, 27, 17209.	1.7	5
84	Wedged etalon tuning for miniature and monolithic lasers. Optics Letters, 2006, 31, 2296.	1.7	4
85	Laser-based volumetric flow visualization by digital color imaging of a spectrally coded volume. Review of Scientific Instruments, 2008, 79, 013710.	0.6	4
86	Linewidth narrowing of a tunable mode-locked pumped continuous-wave Ce:LiCAF laser. Optics Letters, 2015, 40, 3065.	1.7	4
87	Dynamics of solid-state lasers pumped by mode-locked lasers. Optics Express, 2015, 23, 4441.	1.7	4
88	Plasmonic second-harmonic generation in gold:lithium niobate thin films. Journal of the Optical Society of America B: Optical Physics, 2018, 35, 302.	0.9	4
89	Study of Amplitude Noise in a Continuous-Wave Intracavity Frequency-Doubled Raman Laser. IEEE Journal of Quantum Electronics, 2011, 47, 314-319.	1.0	3
90	Modelling and characterisation of continuous wave resonantly pumped diamond Raman lasers. Optics Express, 2021, 29, 18427.	1.7	3

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91	Generation of sub-100-fs ultraviolet pulses from a Kerr-lens mode-locked Ce:LiCAF laser. Applied Optics, 2021, 60, 8316.	0.9	3
92	Non-Collinear Beam Combining of Kilowatt Beams in a Diamond Raman Amplifier. , 2014, , .		2
93	Linewidth-narrowing of a continuous wave terahertz polariton laser using an intracavity etalon. Optics Letters, 2020, 45, 157.	1.7	2
94	Cavity design with single-mirror THz frequency tuning for polariton lasers. Optics Letters, 2022, 47, 3391.	1.7	2
95	Progress on Collisionally Pumped Optical-Field-Ionization Soft X-Ray Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2004, 10, 1351-1362.	1.9	1
96	Tunable ultraviolet microchip Ce <sup>3+</sup> :LiLuF laser. , 2005, , .		1
97	Energy extraction from pulsed amplified stimulated emission lasers operating under conditions of strong saturation. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 1057.	0.9	1
98	Study of amplitude noise in a continuous-wave intracavity frequency-doubled Raman laser. , 2011, , .		1
99	Imaging free and bound NADH towards cancer tissue detection using FLIM system based on SPAD array. , 2017, , .		1
100	Cascaded continuous-wave Raman frequency conversion in external-cavity diamond lasers. , 2017, , .		1
101	Continuous-wave ultraviolet Ce:LiCAF laser. , 2015, , .		1
102	KGW and diamond picosecond visible Raman lasers. , 2010, , .		1
103	Cerium lasers generate ultrafast deep ultraviolet pulses. , 2010, , .		1
104	Femtosecond Ultraviolet Pulses Generated Directly From a Mode-Locked Ce:LiCAF Laser. , 2020, , .		1
105	Asynchronous Cross-Correlation Using a Time Reference. , 2020, , .		1
106	Monolithically integrated widely tunable single-frequency diamond Raman lasers. , 2021, , .		1
107	Demonstration of lasing at 41.8 nm in Xe <sup>8+</sup> -driven in a plasma waveguide. , 2003, , .		0
108	Miniature Ce:LiLuF/Ce:LiCAF dual-crystal single-cavity laser pumped at 266 nm. , 2005, , .		0

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109	Highly efficient ultra-low threshold miniature cerium fluoride lasers generating sub-nanosecond pulses at 287nm and 311nm. , 2006, , .		0
110	Time-resolved pump-probe measurements of UV material cerium-doped BYF. , 2007, , .		0
111	Continuous-wave self-Raman and intracavity doubled laser operation in Nd:GdVO <sub>4</sub> at 586.5 nm. , 2007, , .		0
112	Spectrally Coded Imaging for 3D Particle Field Tracking. , 2007, , .		0
113	Continuous-wave mode locked yellow Raman laser at 559 nm based on a synchronously pumped KGW crystal. , 2009, , .		0
114	Continuous-wave and picosecond mode-locked output from an ultra-violet Ce:LiCAF laser. , 2009, , .		0
115	CW Crystalline Raman Lasers: Multi-Watt and Multi-Wavelength Operation in the Visible. , 2010, , .		0
116	A continuous-wave laser with wavelength-selectable output spanning green-yellow-red. , 2011, , .		0
117	Generating picosecond pulses from Q-switched microchip lasers. , 2011, , .		0
118	Frequency-tunable THz polariton laser based on intracavity RbTiOPO <sub>4</sub> crystal. , 2016, , .		0
119	High power single-longitudinal-mode diamond laser using HÄnsch-Couillaud-type stabilization. , 2017, , .		0
120	Novel liquid crystal cells for short-pulsed monolithic guided-wave laser sources. , 2017, , .		0
121	Single-longitudinal-mode ring diamond Raman laser. , 2017, , .		0
122	Single-longitudinal-mode diamond Raman lasers in the near-infrared spectral region. , 2017, , .		0
123	Enhancing THz Emission using a Shallow-Bounce Configuration. , 2019, , .		0
124	High-Power Single-Frequency 620 nm Laser Based on Diamond Raman and Intracavity Frequency Doubling. , 2019, , .		0
125	Transient Frequency Dynamics in Single-Longitudinal-Mode Diamond Raman Lasers. , 2021, , .		0
126	Generating Ultra-Short Pulses from a Q-Switched Microchip Laser. , 2009, , .		0



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127	Pulse compression dynamics in synchronously pumped continuous wave mode-locked Raman oscillators. , 2010, , .		0
128	Picosecond visible Raman lasers. , 2010, , .		0
129	Maximising performance of compact, cw, visible self-Raman lasers by balancing non-linear SRS and SFG effects. , 2012, , .		0
130	Multiwavelength ultrafast LiNbO3 Raman laser with cascaded terahertz-wave generation. , 2015, , .		0
131	Diamond Raman laser generating 25.5 fs pulses. , 2015, , .		0
132	Multiwavelength ultrafast LiNbO3 Raman laser with cascaded terahertz-wave generation. , 2015, , .		0
133	Beneficial effects of using etalons in an intracavity CW THz polariton laser. , 2017, , .		0
134	Continuously tunable diamond Raman laser for resonance ionization experiments at CERN. , 2019, , .		0
135	High-power single-frequency 620 nm diamond laser. , 2019, , .		0
136	High Raman gain directions in diamond. , 2020, , .		0
137	Enabling the use of Raman lasers for spectroscopy: continuous tunability, narrow linewidth and efficient cascading in diamond. , 2020, , .		0
138	Spectral and polarization effects in cascaded narrow linewidth diamond Raman lasers. , 2020, , .		0
139	Diamond Sodium Guide Star Laser. , 2020, , .		0
140	Continuous Wave Resonantly Pumped Second Stokes Diamond Raman Laser. , 2020, , .		0
141	Linewidth narrowing and power enhancement in polariton lasers through the use of etalons. , 2020, , .		0