Hervé Maillotte

List of Publications by Year in descending order

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143 papers 2,717 citations

28 h-index 197818 49 g-index

144 all docs

144 docs citations

144 times ranked 1885 citing authors

#	Article	IF	CITATIONS
1	Supercontinuum generation in air–silica microstructured fibers with nanosecond and femtosecond pulse pumping. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 765.	2.1	362
2	Brillouin light scattering from surface acoustic waves in a subwavelength-diameter optical fibre. Nature Communications, 2014, 5, 5242.	12.8	142
3	Spectral broadening of a partially coherent CW laser beam in single-mode optical fibers. Optics Express, 2004, 12, 2838.	3.4	132
4	Complete experimental characterization of stimulated Brillouin scattering in photonic crystal fiber. Optics Express, 2007, 15, 15517.	3.4	85
5	Guided acoustic wave Brillouin scattering in photonic crystal fibers. Optics Letters, 2007, 32, 17.	3.3	82
6	Phononic band-gap guidance of acoustic modes in photonic crystal fibers. Physical Review B, 2005, 71, .	3.2	80
7	Symmetry-Breaking Instability of Multimode Vector Solitons. Physical Review Letters, 2002, 89, 083901.	7.8	75
8	Compact broadband continuum source based on microchip laser pumped microstructured fibre. Electronics Letters, 2001, 37, 558.	1.0	72
9	Generation of a broadband single-mode supercontinuum in a conventional dispersion-shifted fiber by use of a subnanosecond microchiplaser. Optics Letters, 2003, 28, 1820.	3.3	68
10	Broadband and flat parametric amplifiers with a multisection dispersion-tailored nonlinear fiber arrangement. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 1532.	2.1	66
11	Impact of Pump Phase Modulation on the Gain of Fiber Optical Parametric Amplifier. IEEE Photonics Technology Letters, 2004, 16, 1289-1291.	2.5	65
12	Vapour microcell for chip scale atomic frequency standard. Electronics Letters, 2007, 43, 279.	1.0	56
13	Synthesis and characterisation of an octupolar polymer and new molecular octupoles with off-resonant third order optical nonlinearities. Chemical Communications, 1999, , 2083-2084.	4.1	52
14	Spatiotemporal behavior of periodic arrays of spatial solitons in a planar waveguide with relaxing Kerr nonlinearity. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 574.	2.1	52
15	Raman-assisted parametric frequency conversion in a normally dispersive single-mode fiber. Optics Letters, 1999, 24, 1561.	3.3	51
16	Impact of pump OSNR on noise figure for fiber-optical parametric amplifiers. IEEE Photonics Technology Letters, 2005, 17, 1178-1180.	2.5	49
17	Annular aperture arrays: study in the visible region of the electromagnetic spectrum. Optics Letters, 2005, 30, 1611.	3.3	44
18	New Third-Order Nonlinear Polymers Functionalized with Disperse Red and Disperse Orange Chromophores with Increased Stability. Chemistry of Materials, 1997, 9, 2921-2927.	6.7	43

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19	Large self-deflection of soliton beams in LiNbO_3. Optics Letters, 2005, 30, 1977.	3.3	43
20	Measurement of nonlinear refraction index and two-photon absorption in a novel organometallic compound. Optics Communications, 1998, 152, 77-82.	2.1	42
21	Picosecond nonlinear refraction measurement in single-beam open Z scan by charge-coupled device image processing. Optics Letters, 1996, 21, 101.	3.3	40
22	High efficiency frequency doubling in fully diced LiNbO ₃ ridge waveguides on silicon. Journal of Optics (United Kingdom), 2016, 18, 085503.	2.2	39
23	Supercontinuum generation using continuous-wave multiwavelength pumping and dispersion management. Optics Letters, 2006, 31, 2036.	3.3	35
24	Reduction and control of stimulated Brillouin scattering in polymer-coated chalcogenide optical microwires. Optics Letters, 2014, 39, 482.	3.3	33
25	Self-formation of multiple spatial photovoltaic solitons. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, S223-S230.	1.4	32
26	Transient dark photovoltaic spatial solitons and induced guiding in slab LiNbO_3 waveguides. Optics Letters, 2001, 26, 1344.	3.3	31
27	Zero-dispersion wavelength mapping in short single-mode optical fibers using parametric amplification. IEEE Photonics Technology Letters, 2006, 18, 22-24.	2.5	31
28	Generation of vector dark-soliton trains by induced modulational instability in a highly birefringent fiber. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 1642.	2.1	30
29	Application of intermodal interference to fibre sensors. Optics Communications, 1986, 60, 261-264.	2.1	29
30	Demonstration of polarization pulling using a fiber-optic parametric amplifier. Optics Express, 2012, 20, 27248.	3.4	28
31	Phase matching for parametric amplification in a single-mode birefringent fiber: influence of the non-phase-matched waves. Journal of the Optical Society of America B: Optical Physics, 1997, 14, 116.	2.1	26
32	Symmetric and Asymmetric Conjugated 3,3′-Bipyridine Derivatives as a New Class of Third-Order NLO Chromophores with an Enhanced Non-resonant, Nonlinear Refractive Index in the Picosecond Range. Advanced Functional Materials, 2002, 12, 203.	14.9	26
33	Experimental observation of the elliptically polarized fundamental vector soliton of isotropic Kerr media. Optics Letters, 2005, 30, 3383.	3.3	26
34	Parametric amplification and wavelength conversion in the 1040–1090 nm band by use of a photonic crystal fiber. Applied Physics Letters, 2009, 94, 111104.	3.3	26
35	Frequency-selective excitation of guided acoustic modes in a photonic crystal fiber. Optics Express, 2011, 19, 7689.	3.4	25
36	Laser beam self-splitting into solitons by optical Kerr nonlinearity. Optics Communications, 1994, 109, 265-271.	2.1	24

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37	Slow-Light Spatial Solitons. Physical Review Letters, 2008, 100, 013908.	7.8	24
38	Large Brillouin gain in Germania-doped core optical fibers up to a 98  mol% doping level. Optics Letters, 2018, 43, 4005.	3.3	23
39	Impact of pump phase modulation on system performance of fibre-optical parametric amplifiers. Electronics Letters, 2005, 41, 350.	1.0	21
40	Supercontinuum Generation From 1.35 to 1.7 \$mu\$m by Nanosecond Pumping Near the Second Zero-Dispersion Wavelength of a Microstructured Fiber. IEEE Photonics Technology Letters, 2008, 20, 842-844.	2.5	21
41	Photonic crystal fiber mapping using Brillouin echoes distributed sensing. Optics Express, 2010, 18, 20136.	3.4	21
42	Sensitivity of the total beam profile distortion Z-scan for the measurement of nonlinear refraction. Optics Communications, 1997, 134, 529-536.	2.1	17
43	Generation of multicolor vector Kerr solitons by cross-phase modulation, four-wave mixing, and stimulated Raman scattering. Optics Letters, 2006, 31, 3480.	3.3	17
44	Temperature coefficient of the high-frequency guided acoustic mode in a photonic crystal fiber. Applied Optics, 2011, 50, 6543.	2.1	17
45	Analysis of ultra-compact waveguide modes in thin film lithium niobate. Applied Physics B: Lasers and Optics, 2015, 118, 261-267.	2.2	17
46	Comparative analysis of stimulated Brillouin scattering at 2  µm in various infrared glass-based optical fibers. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 3792.	2.1	17
47	Demonstration of an All-Fiber Broadband Optical Parametric Amplifier at 1 \$mu\$m. Journal of Lightwave Technology, 2010, 28, 2173-2178.	4.6	16
48	Spatiotemporal dynamics of soliton arrays generated from spatial noise in a planar waveguide with relaxing Kerr nonlinearity. Optics Express, 2002, 10, 942.	3.4	15
49	Quantum fluctuations and correlations of spatial scalar or multimode vector solitons in Kerr media. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, S295-S302.	1.4	15
50	Differential Phase-Shift-Keying Technique-Based Brillouin Echo-Distributed Sensing. IEEE Photonics Technology Letters, 2012, 24, 79-81.	2.5	15
51	Formation of reconfigurable singlemode channel waveguides in LiNbO3 using spatial solitons. Electronics Letters, 2003, 39, 286.	1.0	14
52	Theoretical study of gain distortions in dual-pump fiber optical parametric amplifiers. Optics Communications, 2006, 267, 244-252.	2.1	14
53	Brillouin Optical Time-Domain Analysis of Fiber-Optic Parametric Amplifiers. IEEE Photonics Technology Letters, 2007, 19, 179-181.	2.5	14
54	Supercontinuum generation by nanosecond dual-pumping near the two zero-dispersion wavelengths of a photonic crystal fiber. Optics Communications, 2011, 284, 467-470.	2.1	14

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55	Towards athermal Brillouin strain sensing based on heavily germania-doped core optical fibers. APL Photonics, $2019, 4, .$	5.7	14
56	Investigation of gain ripple in two-pump fiber optical parametric amplifiers. Optics Letters, 2008, 33, 2203.	3.3	13
57	SBS Mitigation in a Microstructured Optical Fiber by Periodically Varying the Core Diameter. IEEE Photonics Technology Letters, 2012, 24, 667-669.	2.5	12
58	Fast-beam self-trapping in LiNbO_3 films by pyroelectric effect. Optics Letters, 2015, 40, 1258.	3.3	11
59	Demonstration of stimulated-Raman-scattering suppression in optical fibers in a multifrequency pumping configuration. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 757.	2.1	10
60	Enhancement of non-resonant non-linear refractive index with reduction of absorption in push–pull molecules by reduction of their donor group strength. Chemical Physics Letters, 2000, 319, 669-673.	2.6	9
61	Simple methods for crosstalk reduction in fiber optical parametric amplifiers. Optics Communications, 2007, 275, 448-452.	2.1	9
62	Low-threshold all-fiber 1000nm supercontinuum source based on highly non-linear fiber. Optics Communications, 2008, 281, 4095-4098.	2.1	9
63	Spectral correlation of four-wave mixing generated in a photonic crystal fiber pumped by a chirped pulse. Optics Letters, 2020, 45, 4148.	3.3	9
64	Raman-assisted three-wave mixing of non-phase-matched waves in optical fibres: application to wide-range frequency conversion. Optics Communications, 2001, 192, 107-121.	2.1	8
65	6, 6Â-distyryl-3, 3Â-bipyridine derivatives: a novel class of tunable chromophores for second-and third-order nonlinear optical applications. Journal of Optics, 2002, 4, S212-S220.	1.5	8
66	Distributed Brillouin Fiber Sensor With Enhanced Sensitivity Based on Anti-Stokes Single-Sideband Suppressed-Carrier Modulation. IEEE Photonics Technology Letters, 2013, 25, 94-96.	2.5	8
67	Temporal Distribution Measurement of the Parametric Spectral Gain in a Photonic Crystal Fiber Pumped by a Chirped Pulse. Photonics, 2019, 6, 20.	2.0	8
68	2-νm Brillouin laser based on infrared nonlinear glass fibers. Applied Optics, 2019, 58, 6365.	1.8	8
69	Parametric Gain Shaping From a Structured Pump Pulse. IEEE Photonics Technology Letters, 2019, 31, 214-217.	2.5	7
70	Noise-free phase conjugation of high power single mode laser beams by stimulated Brillouin scattering. Optics Communications, 1990, 77, 241-246.	2.1	6
71	Coherent picosecond parametric amplification through a Kerr-induced index grating in a single-mode fiber. Optics Communications, 1994, 112, 75-79.	2.1	6
72	Stimulated Raman suppression under dual-frequency pumping in singlemode fibres. Electronics Letters, 1998, 34, 1417.	1.0	6

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73	Numerical and experimental investigations of vector soliton bound-states in a Kerr planar waveguide. Optics Communications, 2005, 249, 285-291.	2.1	6
74	IMAGING THROUGH SCATTERING MEDIA BY PARAMETRIC IMAGE AMPLIFICATION. Journal of Nonlinear Optical Physics and Materials, 1996, 05, 413-417.	1.8	5
75	Broadband and nearly flat parametric gain in single-mode fibers. , 0, , .		5
76	2-Pyridones as a New Photochemically Stable Structural Design for the Off-Resonant Optical Kerr Effect. Advanced Functional Materials, 2002, 12, 339.	14.9	5
77	Cascaded Raman slow light and optical spatial solitons in Kerr media. Physical Review A, 2013, 87, .	2.5	5
78	Distributed feedback picosecond Raman laser emission from CS2. Optics Communications, 1990, 79, 259-266.	2.1	4
79	Wavelength conversion from 1.3 $\hat{A}\mu m$ to 1.5 $\hat{A}\mu m$ in single-mode optical fibres using Raman-assisted three-wave mixing. Journal of Optics, 2000, 2, 132-141.	1.5	4
80	The generation of spatial soliton arrays in a planar Kerr waveguide from seeded spontaneous parametric down conversion. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, \$250-\$258.	1.4	4
81	Tunable stimulated Brillouin scattering in hybrid polymer-chalcogenide tapered fibers. , 2014, , .		4
82	Impact of the longitudinal variations of the chromatic dispersion on the gain of fiber parametric amplifiers. , 2003, , .		4
83	Tunable ultrafast infrared generation in a gas-filled hollow-core capillary by a four-wave mixing process. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 662.	2.1	4
84	Combined Spectral Effects of Pulse Walk-Off and Degenerate Cross-Phase Modulation in Birefringent Fibers. Journal of Nonlinear Optical Physics and Materials, 1997, 06, 313-320.	1.8	3
85	Suppression of stimulated Raman scattering in optical fibres by power-controlled multifrequency pumping. Optics Communications, 1999, 159, 32-36.	2.1	3
86	Pump-power-dependent gain for small-signal parametric amplification in birefringent fibres. Optics Communications, 2001, 191, 245-251.	2.1	3
87	Demonstration of an Integrated LiNbO <formula formulatype="inline"> <tex>\$_3\$</tex></formula> Synchronized Double Phase Modulator and Its Application to Dual-Pump Fiber Optical Parametric Amplifiers and Wavelength Converters. Journal of Lightwave Technology, 2008, 26, 777-781.	4.6	3
88	Fiber optic Brillouin distributed sensing using phase-shift keying modulation techniques. , 2012, , .		3
89	Sensitivity enhancement in long-range distributed Brillouin fiber sensor using an anti-Stokes single-sideband probe and a bidirectional EDFA. , 2012, , .		3
90	Self-induced multiple soliton-like beams by stimulated scattering. Optics Communications, 1994, 109, 272-278.	2.1	2

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91	Transmission through a nonlinear thin layer near the critical angle of incidence: application to the sensitive determination of the nonlinear refractive index. Journal of Optics, 2002, 4, 303-308.	1.5	2
92	Simple Method for Crosstalk Reduction in Fiber Optical Parametric Amplifiers. , 2006, , .		2
93	Experimental Observation of Large Guided Acoustic Wave Brillouin Scattering in Photonic Crystal Fibres., 2006,,.		2
94	New Vapor Cell Technology for Chip Scale Atomic Clock. Frequency Control Symposium and Exhibition, Proceedings of the IEEE International, 2007, , .	0.0	2
95	Spatio-temporal dynamics of multicolor spatial Kerr solitons. Optical and Quantum Electronics, 2008, 40, 271-279.	3.3	2
96	Periodically poled LiNbO ₃ ridge waveguides on silicon for second-harmonic generation. Proceedings of SPIE, 2016, , .	0.8	2
97	New radio-frequency resonators based on periodically poled lithium niobate thin film and ridge structures. , 2016, , .		2
98	Suppression of SBS in a photonic crystal fiber with periodically-varied core diameter., 2011,,.		2
99	Stimulated Brillouin scattering in hybrid chalcogenide-PMMA microwires. , 2013, , .		2
100	Raman-induced slow light on spatial soliton in Kerr media. , 2007, , .		2
101	Wavelength, power and pulse duration influence on spatial soliton formation in AlGaAs. Optics Communications, 2005, 251, 186-193.	2.1	1
102	Impact of pump quality on the performances of fibre optical parametric amplifiers. , 2008, , .		1
103	System Performances of Fiber Optical Parametric Amplifiers. Fiber and Integrated Optics, 2008, 27, 516-531.	2.5	1
104	Role of microstructure on guided acoustic wave Brillouin scattering in photonic crystal fibers. Proceedings of SPIE, 2009, , .	0.8	1
105	Effect of inhomogeneities on backward and forward Brillouin scattering in photonic crystal fibers. Proceedings of SPIE, 2010, , .	0.8	1
106	Experimental observation of Brillouin linewidth broadening and decay time in photonic crystal fiber. , 2010, , .		1
107	Symmetry-breaking instability of quadratic soliton bound states. Physical Review A, 2011, 83, .	2.5	1
108	Observation of surface acoustic wave Brillouin scattering in optical microfibers., 2013,,.		1

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109	Kerr Optical Frequency Combs Generated Around 2-1 $\!\!\!^4$ m in a Dual-Pumped Brillouin Fiber Ring Resonator. , 2019, , .		1
110	Slow light induced by stimulated Raman scattering on spatial Kerr soliton. Annales De Physique, 2007, 32, 103-106.	0.2	1
111	Single-mode supercontinuum generation in a standard dispersion-shifted fiber using a nanosecond microchip laser. , 2002, , .		1
112	Temperature and strain Brillouin sensing coefficients of heavily doped Germanium-core optical fibers. , 2018, , .		1
113	A Single Rod Stable Resonator of Constant Multimode Divergence over a Wide Power Range. Journal of Modern Optics, 1991, 38, 2311-2321.	1.3	0
114	Spontaneous creation of soliton-like beams by single-directional control of self-focusing and stimulated scattering in a Kerr medium. , $1994, , .$		0
115	$$ $$ $$ $$ $$ $$ $$ $$ $$		0
116	< title $>$ Modification of push-pull molecules and polymers for higher nonlinear refraction and lower linear and nonlinear absorptions $<$ /title $>$. , 1998, , .		0
117	<title>Total profile distortion Z-scan</title> ., 1999, 3572, 218.		0
118	Experimental Observation of the Elliptically Polarized Fundamental Vector Soliton of Isotropic Kerr Media., 2005,, FA4.		0
119	Brillouin Optical Time Domain Analysis of Fiber Optic Parametric Amplifiers. , 2006, , .		0
120	Stability of spatial soliton arrays generated in a noninstantaneous Kerr medium from partially spatiotemporally coherent light. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 1099.	2.1	0
121	Supercontinuum generation from $1350\mathrm{to}1700\mathrm{nm}$ by nanosecond pumping near the second zero dispersion wavelength of a photonic crystal fiber. , $2008,$, .		0
122	Gain oscillations in two-pump fiber optical parametric amplifiers., 2008,,.		0
123	All-fiber optical parametric amplifier at 1 ± 0.3 All-fiber optical		0
124	Observation of brillouin linewidth broadening and decay time in photonic crystal fiber. , 2010, , .		0
125	Opto-acoustic coupling and Brillouin phenomena in microstructure optical fibers. , 2012, , .		0
126	Stimulated Brillouin scattering in polymer-coated chalcogenide microfibers. , 2014, , .		0

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127	Multimode Brillouin scattering in a long tapered birefringent photonic crystal fiber., 2015,,.		O
128	Non-Recurrent Periodic Arrays of Spatial Solitons in a Planar Kerr Waveguide., 2001,, 99-102.		0
129	Symmetry-breaking instability of multimode vector solitons in Kerr media. , 2002, , .		0
130	Temporal analysis of dark spatial photovoltaic solitons , 2003, , .		0
131	Influence of the phase modulation of the pump wave in fiber optical parametric amplifiers. , 2004, , .		0
132	Quantum fluctuations and correlations of multimode vector solitons in Kerr media., 2004,,.		0
133	Numerical and experimental investigations of vector soliton bound-states in a Kerr planar waveguide. , 2004, , .		O
134	Complex waveguide trajectory induced by spatial soliton in LiNbO3., 2005,,.		0
135	Continuum generation in a dispersion-shifted fiber using one or two continuous-wave Raman fiber lasers. , 2005, , .		O
136	Observation expérimentale d'un soliton spatial bicolore dans un milieu Kerr en présence de diffusion Raman stimulée. European Physical Journal Special Topics, 2006, 135, 309-310.	0.2	0
137	Guided Acoustic Wave Brillouin Scattering in a Nanostructure Core Fiber. , 2010, , .		0
138	Multicolor soliton and cascaded Raman generation in a nonlinear planar waveguide., 2010,,.		0
139	Brillouin echo-distributed sensing based on differential phase-shift keying technique. , 2011, , .		O
140	Demonstration of polarization pulling in a fiber-optical parametric amplifier. , 2012, , .		0
141	Stimulated Brillouin scattering in Germanium-doped-core optical fibers up to 98% mol doping level. , 2018, , .		0
142	Spectral Distributions of Chirped Pulsed Four-Wave Mixing in a Photonic Crystal Fiber Measured by Dispersive Fourier Transform Method., 2020,,.		0
143	Tunable source of infrared pulses in gas-filled hollow core capillary. , 2020, , .		0