Sergei K Turitsyn

List of Publications by Year
in descending order

423	13,937	19608 61	30848 102
papers	citations	h-index	g-index

429	429	429	4734
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Random distributed feedback fibre laser. Nature Photonics, 2010, 4, 231-235.	15.6	797
2	Time stretch and its applications. Nature Photonics, 2017, 11, 341-351.	15.6	333
3	Averaged pulse dynamics in a cascaded transmission system with passive dispersion compensation. Optics Letters, 1996, 21, 327.	1.7	321
4	Random distributed feedback fibre lasers. Physics Reports, 2014, 542, 133-193.	10.3	315
5	Nonlinear Fourier transform for optical data processing and transmission: advances and perspectives. Optica, 2017, 4, 307.	4.8	289
6	Dispersion-managed solitons in fibre systems and lasers. Physics Reports, 2012, 521, 135-203.	10.3	255
7	Recent progress in investigating optical rogue waves. Journal of Optics (United Kingdom), 2013, 15, 060201.	1.0	252
8	Recent advances in fundamentals and applications of random fiber lasers. Advances in Optics and Photonics, 2015, 7, 516.	12.1	248
9	Generation of double-scale femto/pico-second optical lumps in mode-locked fiber lasers. Optics Express, 2009, 17, 20707.	1.7	244
10	Machine learning and applications in ultrafast photonics. Nature Photonics, 2021, 15, 91-101.	15.6	219
11	Tunable random fiber laser. Physical Review A, 2011, 84, .	1.0	208
12	Nonlinear modes of a macroscopic quantum oscillator. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 278, 225-230.	0.9	191
13	Optical spectral broadening and supercontinuum generation in telecom applications. Optical Fiber Technology, 2006, 12, 122-147.	1.4	188
14	The laminarâ€“turbulent transition in a fibre laser. Nature Photonics, 2013, 7, 783-786.	15.6	177
15	Ultralong Raman Fiber Lasers as Virtually Lossless Optical Media. Physical Review Letters, 2006, 96, 023902.	2.9	159
16	All-fiber passively mode-locked Tm-doped NOLM-based oscillator operating at 2-Î¼m in both soliton and noisy-pulse regimes. Optics Express, 2014, 22, 7875.	1.7	157
17	Energy Localization in Nonlinear Fiber Arrays: Collapse-Effect Compressor. Physical Review Letters, 1995, 75, 73-76.	2.9	153
18	Multidimensional solitons in fiber arrays. Optics Letters, 1994, 19, 329.	1.7	138

#	Article	IF	Citations
19	Raman fiber lasers with a random distributed feedback based on Rayleigh scattering. Physical Review A, 2010, 82, .	1.0	135
20	Real-time observation of dissipative soliton formation in nonlinear polarization rotation mode-locked fibre lasers. Communications Physics, 2018, 1, .	2.0	132
21	Information Capacity of Optical Fiber Channels with Zero Average Dispersion. Physical Review Letters, 2003, 91, 203901.	2.9	128
22	Effect of Rayleigh-scattering distributed feedback on multiwavelength Raman fiber laser generation. Optics Letters, 2011, 36, 130.	1.7	125
23	Vector dark solitons. Optics Letters, 1993, 18, 337.	1.7	123
24	Nonlinear Inverse Synthesis and Eigenvalue Division Multiplexing in Optical Fiber Channels. Physical Review Letters, 2014, 113, 013901.	2.9	122
25	Nonlinear inverse synthesis for high spectral efficiency transmission in optical fibers. Optics Express, 2014, 22, 26720.	1.7	119
26	Stochasticity, periodicity and localized light structures in partially mode-locked fibre lasers. Nature Communications, 2015, 6, 7004.	5.8	116
27	Polarisation Dynamics of Vector Soliton Molecules in Mode Locked Fibre Laser. Scientific Reports, 2013, 3, 3154.	1.6	114
28	Wave kinetics of random fibre lasers. Nature Communications, 2015, 6, 6214.	5.8	112
29	Stability of Discrete Solitons and Quasicollapse to Intrinsically Localized Modes. Physical Review Letters, 1994, 73, 1055-1059.	2.9	111
30	Carbon nanotubes for ultrafast fibre lasers. Nanophotonics, 2017, 6, 1-30.	2.9	107
31	Optical pulse dynamics in fiber links with dispersion compensation. Optics Communications, 1997, 134, 317-329.	1.0	103
32	Cascaded random distributed feedback Raman fiber laser operating at 12 Î¼m. Optics Express, 2011, 19, 18486.	1.7	98
33	Doubling of optical signals using triangular pulses. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 1492.	0.9	93
34	Capacity estimates for optical transmission based on the nonlinear Fourier transform. Nature Communications, 2016, 7, 12710.	5.8	92
35	4 Tb/s Transmission Reach Enhancement Using 10 Ã— 400 Gb/s Super-Channels and Polarization Insensitive Dual Band Optical Phase Conjugation. Journal of Lightwave Technology, 2016, 34, 1717-1723.	2.7	89
36	Performance Versus Complexity Study of Neural Network Equalizers in Coherent Optical Systems. Journal of Lightwave Technology, 2021, 39, 6085-6096.	2.7	89

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37	Modeling of CW Yb-doped fiber lasers with highly nonlinear cavity dynamics. Optics Express, 2011, 19, 8394.	1.7	88
38	Nonlinear inverse synthesis technique for optical links with lumped amplification. Optics Express, 2015, 23, 8317.	1.7	88
39	Passive Nonlinear Pulse Shaping in Normally Dispersive Fiber Systems. IEEE Journal of Quantum Electronics, 2008, 44, 1196-1203.	1.0	86
40	270-km Ultralong Raman Fiber Laser. Physical Review Letters, 2009, 103, 133901.	2.9	82
41	Breathing solitons in optical fiber links. JETP Letters, 1996, 63, 861-866.	0.4	80
42	Sparse identification for nonlinear optical communication systems: SINO method. Optics Express, 2016, 24, 30433.	1.7	80
43	Asymptotic breathing pulse in optical transmission systems with dispersion compensation. Physical Review E, 1997, 55, 3624-3633.	0.8	79
44	Dispersion-managed solitons in optical amplifier transmission systems with zero average dispersion. Optics Letters, 1998, 23, 682.	1.7	79
45	Generation of 1.7-Î¼J pulses at 1.55 Î¼m by a self-mode-locked all-fiber laser with a kilometers-long linear-ringcavity. Laser Physics Letters, 2010, 7, 661-665.	0.6	79
46	Spiral attractor created by vector solitons. Light: Science and Applications, 2014, 3, e131-e131.	7.7	78
47	Variational approach to optical pulse propagation in dispersion compensated transmission systems. Optics Communications, 1998, 151, 117-135.	1.0	76
48	Physics and mathematics of dispersion-managed optical solitons. Comptes Rendus Physique, 2003, 4, 145-161.	0.3	75
49	Spectrum-, pulsewidth-, and wavelength-switchable all-fiber mode-locked Yb laser with fiber based birefringent filter. Optics Express, 2012, 20, 17797.	1.7	75
50	Dual-wavelength, ultralong Raman laser with Rayleigh-scattering feedback. Optics Letters, 2010, 35, 1100.	1.7	74
51	Stabilizing effects of dispersion management. Physica D: Nonlinear Phenomena, 2001, 152-153, 794-817.	1.3	71
52	Simultaneous Spatial and Spectral Transparency in Ultralong Fiber Lasers. Physical Review Letters, 2008, 101, 123903.	2.9	71
53	Turbulent broadening of optical spectra in ultralong Raman fiber lasers. Physical Review A, 2008, 77, .	1.0	70
54	Hydrodynamic 2D Turbulence and Spatial Beam Condensation in Multimode Optical Fibers. Physical Review Letters, 2019, 122, 103902.	2.9	68

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55	Theory of parabolic pulse generation in tapered fiber. Optics Letters, 2007, 32, 331.	1.7	67
56	Bound state vector solitons with locked and precessing states of polarization. Optics Express, 2013, 21, 26868.	1.7	66
57	Nonlinear spectral management: Linearization of the lossless fiber channel. Optics Express, 2013, 21, 24344.	1.7	65
58	Digital signal processing based on inverse scattering transform. Optics Letters, 2013, 38, 4186.	1.7	65
59	Regeneration limit of classical Shannon capacity. Nature Communications, 2014, 5, 3861.	5.8	64
60	Inverse four-wave mixing and self-parametric amplification in optical fibre. Nature Photonics, 2015, 9, 608-614.	15.6	64
61	Statistics of soliton-bearing systems with additive noise. Physical Review E, 2001, 63, 025601.	0.8	63
62	Experimental and theoretical study of longitudinal power distribution in a random DFB fiber laser. Optics Express, 2012, 20, 11178.	1.7	63
63	Mode-locking via dissipative Faraday instability. Nature Communications, 2016, 7, 12441.	5.8	62
64	Passively harmonic mode locked erbium doped fiber soliton laser with carbon nanotubes based saturable absorber. Optical Materials Express, 2012, 2, 884.	1.6	59
65	Self-Similar Parabolic Optical Solitary Waves. Theoretical and Mathematical Physics(Russian) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.3	58
66	Dissipative dispersion-managed solitons in mode-locked lasers. Optics Letters, 2009, 34, 3286.	1.7	57
67	Exceeding the Nonlinear-Shannon Limit using Raman Laser Based Amplification and Optical Phase Conjugation. , 2014, , .		57
68	Bismuth doped fibre amplifier operating in E- and S- optical bands. Optical Materials Express, 2021, 11, 127.	1.6	56
69	Dispersion-Managed Solitons and Optimization of the Dispersion Management. Optical Fiber Technology, 1998, 4, 384-452.	1.4	55
70	Demonstration of Nonlinear Inverse Synthesis Transmission Over Transoceanic Distances. Journal of Lightwave Technology, 2016, 34, 2459-2466.	2.7	54
71	Optical rogue waves in telecommunication data streams. Physical Review A, 2011, 83, .	1.0	53
72	Vector solitons with locked and precessing states of polarization. Optics Express, 2012, 20, 27434.	1.7	53

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73	Nonlinear pulse combining and pulse compression in multi-core fibers. Optics Letters, 2015, 40, 721.	1.7	53
74	Soliton and collapse regimes of pulse generation in passively mode-locking laser systems. Optics Letters, 1995, 20, 398.	1.7	52
75	Average dynamics of the optical soliton in communication lines with dispersion management: Analytical results. Physical Review E, 1998, 58, R48-R51.	0.8	52
76	Evolution and stability of pulse regimes in SESAM-mode-locked femtosecond fiber lasers. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 346.	0.9	51
77	Dissipative solitons in fiber lasers. Physics-Uspekhi, 2016, 59, 642-668.	0.8	51
78	Fast mode decomposition in few-mode fibers. Nature Communications, 2020, 11, 5507.	5.8	51
79	Optical turbulence and spectral condensate in long-fiber lasers. Physical Review A, 2009, 80, .	1.0	50
80	Generation of triangular-shaped optical pulses in normally dispersive fibre. Journal of Optics (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.0	50
81	Variational Approach to the Design of Optical Communication Systems with Dispersion Management. Optical Fiber Technology, 1998, 4, 151-188.	1.4	49
82	Laser Beam Self-Focusing in the Atmosphere. Physical Review Letters, 2009, 102, 233902.	2.9	49
83	Nonstable solitons and sharp criteria for wave collapse. Physical Review E, 1993, 47, R13-R16.	0.8	48
84	Theory of guiding-center breathing soliton propagation in optical communication systems with strong dispersion management. Optics Letters, 1997, 22, 1544.	1.7	48
85	Electron cavitation and relativistic self-focusing in underdense plasma. Physical Review E, 1998, 57, 7122-7125.	0.8	48
86	Nonlinear loop mirror-based all-optical signal processing in fiber-optic communications. Optical Fiber Technology, 2008, 14, 299-316.	1.4	48
87	Unveiling Temporal Correlations Characteristic of a Phase Transition in the Output Intensity of a Fiber Laser. Physical Review Letters, 2016, 116, 033902.	2.9	48
88	Graphene based widely-tunable and singly-polarized pulse generation with random fiber lasers. Scientific Reports, 2016, 5, 18526.	1.6	48
89	Symmetrical dispersion compensation for standard monomode-fiber-based communication systems with large amplifier spacing. Optics Letters, 1997, 22, 982.	1.7	47
90	Analytic criterion for soliton instability in a nonlinear fiber array. Physical Review E, 1995, 52, 5549-5554.	0.8	46

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91	Advanced Convolutional Neural Networks for Nonlinearity Mitigation in Long-Haul WDM Transmission Systems. Journal of Lightwave Technology, 2021, 39, 2397-2406.	2.7	46
92	Theory of average pulse propagation in high-bit-rate optical transmission systems with strong dispersion management. JETP Letters, 1997, 65, 845-851.	0.4	44
93	Numerical modeling of fiber lasers with long and ultra-long ring cavity. Optics Express, 2013, 21, 12942.	1.7	44
94	Mode-locked fiber lasers with significant variability of generation regimes. Optical Fiber Technology, 2014, 20, 615-620.	1.4	44
95	Reduced-power optical solitons in fiber lines with short-scale dispersion management. Optics Letters, 1999, 24, 869.	1.7	43
96	Sub-100 fs mode-locked erbium-doped fiber laser using a 45Â°-tilted fiber grating. Optics Express, 2013, 21, 28297.	1.7	43
97	Nonlinear solitary waves with Gaussian tails. Physica D: Nonlinear Phenomena, 1999, 128, 273-295.	1.3	42
98	Periodic nonlinear Fourier transform for fiber-optic communications, Part I: theory and numerical methods. Optics Express, 2016, 24, 18353.	1.7	42
99	Dynamics of self-similar dispersion-managed soliton presented in the basis of chirped Gauss-Hermite functions. JETP Letters, 1998, 67, 640-646.	0.4	41
100	Combining nonlinear Fourier transform and neural network-based processing in optical communications. Optics Letters, 2020, 45, 3462.	1.7	41
101	Optimal dispersion maps for wavelength-division-multiplexed soliton transmission. Optics Letters, 1998, 23, 597.	1.7	40
102	Machine Learning Methods for Control of Fibre Lasers with Double Gain Nonlinear Loop Mirror. Scientific Reports, 2019, 9, 2916.	1.6	40
103	Nonlinear Fourier Transform for Analysis of Coherent Structures in Dissipative Systems. Physical Review Letters, 2019, 122, 153901.	2.9	40
104	Pattern Generation by Dissipative Parametric Instability. Physical Review Letters, 2016, 116, 028701.	2.9	39
105	Analysis of laser radiation using the Nonlinear Fourier transform. Nature Communications, 2019, 10, 5663.	5.8	39
106	Fiber echo state network analogue for high-bandwidth dual-quadrature signal processing. Optics Express, 2019, 27, 2387.	1.7	39
107	Self-similar core and oscillatory tails of a path-averaged chirped dispersion-managed optical pulse. Optics Letters, 1998, 23, 1351.	1.7	38
108	Optical frequency conversion, pulse compression and signal copying using triangular pulses. , 2008, , .		38

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109	Complex-Valued Neural Network Design for Mitigation of Signal Distortions in Optical Links. Journal of Lightwave Technology, 2021, 39, 1696-1705.	2.7	38
110	All-optical TDM to WDM signal conversion and partial regeneration using XPM with triangular pulses. , 2008, , .		37
111	Gamma-shaped long-cavity normal-dispersion mode-locked Er-fiber laser for sub-nanosecond high-energy pulsed generation. Laser Physics Letters, 2012, 9, 59-67.	0.6	37
112	Blow-up in the Boussinesq equation. Physical Review E, 1993, 47, R796-R799.	0.8	36
113	Impact of nonlinear spectral broadening in ultra-long Raman fibre lasers. Optics Express, 2007, 15, 16690.	1.7	36
114	Amplifier similariton fiber laser with nonlinear spectral compression. Optics Letters, 2012, 37, 4531.	1.7	36
115	Multiâ€“Band Programmable Gain Raman Amplifier. Journal of Lightwave Technology, 2021, 39, 429-438.	2.7	36
116	Demonstration of Phase-Conjugated Subcarrier Coding for Fiber Nonlinearity Compensation in CO-OFDM Transmission. Journal of Lightwave Technology, 2015, 33, 2206-2212.	2.7	35
117	Gain through losses in nonlinear optics. Light: Science and Applications, 2018, 7, 43.	7.7	35
118	Experimental demonstration of mode structure in ultralong Raman fiber lasers. Optics Letters, 2007, 32, 1135.	1.7	34
119	Coherent propagation and energy transfer in low-dimension nonlinear arrays. Physical Review A, 2012, 86, .	1.0	34
120	Neural Networks-Based Equalizers for Coherent Optical Transmission: Caveats and Pitfalls. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-23.	1.9	34
121	Stability of vector solitons in optical fibers. Optics Letters, 1992, 17, 1497.	1.7	33
122	All-optical-switching and pulse amplification and steering in nonlinear fiber arrays. Physica D: Nonlinear Phenomena, 1995, 87, 262-272.	1.3	33
123	All-optical passive 2R regeneration for NÃ—40 Gbit/s WDM transmission using NOLM and novel filtering technique. Optics Communications, 2003, 217, 227-232.	1.0	33
124	Secure key distribution over a 500 km long link using a Raman ultraâ€long fiber laser. Laser and Photonics Reviews, 2014, 8, 436-442.	4.4	33
125	Nonlinear Inverse Synthesis for Optical Links With Distributed Raman Amplification. Journal of Lightwave Technology, 2016, 34, 1778-1786.	2.7	33
126	Light transport and vortex-supported wave-guiding in micro-structured optical fibres. Scientific Reports, 2020, 10, 2507.	1.6	33

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127	Breathing self-similar dynamics and oscillatory tails of the chirped dispersion-managed soliton. Physical Review E, 1998, 58, R1256-R1259.	0.8	32
128	Intracavity dynamics in high-power mode-locked fiber lasers. Physical Review A, 2010, 81, .	1.0	32
129	Modulation instability in â€˜high power laser amplifiers. Optics Express, 2010, 18, 1380.	1.7	32
130	Intracavity incoherent supercontinuum dynamics and rogue waves in a broadband dissipative soliton laser. Nature Communications, 2021, 12, 5567.	5.8	32
131	Dynamics of a nonlinear dipole vortex. Physics of Fluids, 1995, 7, 2220-2229.	1.6	31
132	Spatiotemporal optical bullets in two-dimensional fiber arrays and their stability. Physical Review A, 2015, 91, .	1.0	31
133	Pulse propagation in optical fibers near the zero dispersion point. Physical Review E, 1993, 47, R3844-R3847.	0.8	30
134	Dual-pump Raman amplification with increased flatness using modulation instability. Optics Express, 2005, 13, 1079.	1.7	30
135	Experiments on the generation of parabolic pulses in fibers with length-varying normal chromatic dispersion. JETP Letters, 2007, 85, 319-322.	0.4	30
136	Extremely short-length surface plasmon resonance devices. Optics Express, 2008, 16, 20227.	1.7	29
137	Nonlinear communication channels with capacity above the linear Shannon limit. Optics Letters, 2012, 37, 3600.	1.7	29
138	Polarization-multiplexed nonlinear inverse synthesis with standard and reduced-complexity NFT processing. Optics Express, 2018, 26, 17360.	1.7	29
139	Convolutional long short-term memory neural network equalizer for nonlinear Fourier transform-based optical transmission systems. Optics Express, 2021, 29, 11254.	1.7	29
140	Fokker-Planck equation approach to the description of soliton statistics in optical fiber transmission systems. Journal of the Optical Society of America B: Optical Physics, 2005, 22, 743.	0.9	28
141	Lagrangian and Eulerian descriptions of inertial particles in random flows. Journal of Turbulence, 2007, 8, N16.	0.5	28
142	Stable optical vortices in nonlinear multicore fibers. Light: Science and Applications, 2015, 4, e314-e314.	7.7	28
143	New Approaches to Coding Information using Inverse Scattering Transform. Physical Review Letters, 2017, 118, 223901.	2.9	28
144	Real-time observation of the optical Sagnac effect in ultrafast bidirectional fibre lasers. APL Photonics, 2020, 5, 016104.	3.0	28

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145	Transfer Learning for Neural Networks-Based Equalizers in Coherent Optical Systems. Journal of Lightwave Technology, 2021, 39, 6733-6745.	2.7	27
146	Study of the operating regime for all-optical passive 2R regeneration of dispersion-managed RZ data at 40 Gb/s using in-line NOLMs. IEEE Photonics Technology Letters, 2002, 14, 30-32.	1.3	26
147	Power-controlled phase-matching and instability of CW propagation in multicore optical fibers with a central core. Optics Letters, 2013, 38, 4232.	1.7	26
148	Regenerative Fourier transformation for dual-quadrature regeneration of multilevel rectangular QAM. Optics Letters, 2015, 40, 3117.	1.7	26
149	Nonlinear combining and compression in multicore fibers. Physical Review A, 2016, 94, .	1.0	26
150	Machine learning-based pulse characterization in figure-eight mode-locked lasers. Optics Letters, 2019, 44, 3410.	1.7	26
151	Non-Gaussian statistics of an optical soliton in the presence of amplified spontaneous emission. Optics Letters, 2003, 28, 2097.	1.7	25
152	Sub-critical regime of femtosecond inscription. Optics Express, 2007, 15, 14750.	1.7	25
153	Optical turbulence and spectral condensate in long fibre lasers. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 2496-2508.	1.0	25
154	Periodic nonlinear Fourier transform for fiber-optic communications, Part II: eigenvalue communication. Optics Express, 2016, 24, 18370.	1.7	25
155	Numerical investigation of the impact of reflectors on spectral performance of Raman fibre laser. Optics Express, 2010, 18, 4469.	1.7	24
156	Compensation of Nonlinear Impairments Using Inverse Perturbation Theory With Reduced Complexity. Journal of Lightwave Technology, 2020, 38, 1250-1257.	2.7	24
157	Bit Error Rate Estimation Methods for QPSK CO-OFDM Transmission. Journal of Lightwave Technology, 2014, 32, 2951-2959.	2.7	23
158	Nonlinear multicore waveguiding structures with balanced gain and loss. Physical Review A, 2015, 91, .	1.0	23
159	Contour integrals for numerical computation of discrete eigenvalues in the Zakharovâ€“Shabat problem. Optics Letters, 2018, 43, 3690.	1.7	23
160	Soliton-based discriminator of noncoherent optical pulses. Physical Review A, 2008, 78, .	1.0	22
161	Polarization insensitive in-fiber mode-locker based on carbon nanotube with N-methyl-2-pryrrolidone solvent filled fiber microchamber. Applied Physics Letters, 2012, 100, .	1.5	22
162	On the Design of NFT-Based Communication Systems With Lumped Amplification. Journal of Lightwave Technology, 2017, 35, 5464-5472.	2.7	22

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163	Spatiotemporal pulse collapse on periodic potentials. Physical Review E, 1994, 49, R2536-R2539.	0.8	21
164	Autosoliton transmission in dispersion-managed systems guided by in-line nonlinear optical loop mirrors. Optics Letters, 2000, 25, 1240.	1.7	21
165	Reduction of nonlinear intrachannel effects by channel asymmetry in transmission lines with strong bit overlapping. IEEE Photonics Technology Letters, 2003, 15, 1473-1475.	1.3	21
166	Non-Gaussian error probability in optical soliton transmission. Physica D: Nonlinear Phenomena, 2004, 195, 1-28.	1.3	21
167	Information-Theory Analysis of Skewed Coding for Suppression of Pattern-Dependent Errors in Digital Communications. IEEE Transactions on Communications, 2007, 55, 237-241.	4.9	21
168	Random Distributed Feedback Fiber Laser. Optics and Photonics News, 2010, 21, 33.	0.4	21
169	Intermediate asymptotics in nonlinear optical systems. Physical Review A, 2012, 85, .	1.0	21
170	Generation of dissipative solitons in an actively mode-locked ultralong fibre laser. Quantum Electronics, 2013, 43, 95-98.	0.3	21
171	Light self-focusing in the atmosphere: thin window model. Scientific Reports, 2016, 6, 30697.	1.6	21
172	Gain-through-filtering enables tuneable frequency comb generation in passive optical resonators. Nature Communications, 2019, 10, 4489.	5.8	21
173	Theory of energy evolution in laser resonators with saturated gain and non-saturated loss. Optics Express, 2009, 17, 11898.	1.7	20
174	Conditional Probability Calculations for the Nonlinear SchrÃ¶dinger Equation with Additive Noise. Physical Review Letters, 2014, 113, 230602.	2.9	20
175	Enhanced power breathing soliton in communication systems with dispersion management. Physical Review E, 1997, 56, R4951-R4954.	0.8	19
176	Generalized momentum method to describe high-frequency solitary wave propagation in systems with varying dispersion. Physical Review E, 1998, 58, R5264-R5267.	0.8	19
177	Dispersion-managed soliton in fiber links with in-line filtering presented in the basis of chirped Gaussâ€“Hermite functions. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 1321.	0.9	19
178	Inverse design of mode-locked fiber laser by particle swarm optimization algorithm. Scientific Reports, 2021, 11, 13555.	1.6	19
179	Nonlinear Fourier transform for characterization of the coherent structures in optical microresonators. Optics Letters, 2020, 45, 3059.	1.7	19
180	Chirped solitons with strong confinement in transmission links with in-line fiber Bragg gratings. Optics Letters, 1998, 23, 600.	1.7	18

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181	Discrete localized states and localization dynamics in discrete nonlinear SchrÃ¶dinger equations. Physica Scripta, 1996, T67, 160-166.	1.2	17
182	Generalized root-mean-square momentum method to describe chirped return-to-zero signal propagation in dispersion-managed fiber links. IEEE Photonics Technology Letters, 1999, 11, 203-205.	1.3	17
183	Symmetries, chirp-free points, and bistability in dispersion-managed fiber lines. Optics Letters, 1999, 24, 1871.	1.7	17
184	Ground states of dispersion-managed nonlinear SchrÃ¶dinger equation. Physical Review E, 2000, 62, 7358-7364.	0.8	17
185	Time domain all-optical signal processing at a RZ optical receiver. Optics Express, 2005, 13, 6217.	1.7	17
186	Random walks and random numbers from supercontinuum generation. Optics Express, 2012, 20, 11143.	1.7	17
187	Adiabatic Soliton Laser. Physical Review Letters, 2015, 114, 113901.	2.9	17
188	RIN Mitigation and Transmission Performance Enhancement With Forward Broadband Pump. IEEE Photonics Technology Letters, 2018, 30, 254-257.	1.3	17
189	Wave collapse and optical-pulse compression. Physical Review A, 1993, 47, R27-R29.	1.0	16
190	Stability of an optical soliton with Gaussian tails. Physical Review E, 1997, 56, R3784-R3787.	0.8	16
191	Hamiltonian averaging and integrability in nonlinear systems with periodically varying dispersion. JETP Letters, 1999, 69, 499-504.	0.4	16
192	Averaged model and integrable limits in nonlinear double-periodic Hamiltonian systems. Physical Review E, 2000, 61, 3127-3132.	0.8	16
193	Optimal span length in high-speed transmission systems with hybrid Ramanâ€“erbium-doped fiber amplification. Optics Letters, 2005, 30, 23.	1.7	16
194	Digital backpropagation in the nonlinear Fourier domain. , 2015, , .		16
195	Ripple distribution for nonlinear fiber-optic channels. Optics Express, 2017, 25, 2228.	1.7	15
196	Capacity Lower Bounds of the Noncentral Chi-Channel With Applications to Soliton Amplitude Modulation. IEEE Transactions on Communications, 2018, 66, 2978-2993.	4.9	15
197	Signal Modulation and Processing in Nonlinear Fibre Channels by Employing the Riemannâ€“Hilbert Problem. Journal of Lightwave Technology, 2018, 36, 5714-5727.	2.7	15
198	Optical Pulse Compression Using Fiber Arrays. Optical Fiber Technology, 1995, 1, 244-246.	1.4	14

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199	Hamiltonian averaging in soliton-bearing systems with a periodically varying dispersion. Physical Review E, 1999, 59, 3843-3846.	0.8	14
200	Novel approaches to numerical modeling of periodic dispersion-managed fiber communication systems. IEEE Journal of Selected Topics in Quantum Electronics, 2000, 6, 263-275.	1.9	14
201	Conversion of a chirped Gaussian pulse to a soliton or a bound multisoliton state in quasi-lossless and lossy optical fiber spans. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 1254.	0.9	14
202	Weakly-Constrained Codes for Suppression of Patterning Effects in Digital Communications. IEEE Transactions on Communications, 2010, 58, 2845-2854.	4.9	14
203	Optimization of cascaded regenerative links based on phase sensitive amplifiers. Optics Letters, 2013, 38, 4378.	1.7	14
204	Intensity-only-measurement mode decomposition in few-mode fibers. Optics Express, 2021, 29, 36769.	1.7	14
205	Deep reinforcement learning for self-tuning laser source of dissipative solitons. Scientific Reports, 2022, 12, 7185.	1.6	14
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