

Anna C Peacock

List of Publications by Year in descending order

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173
papers

4,697
citations

94381

37
h-index

106281

65
g-index

177
all docs

177
docs citations

177
times ranked

3275
citing authors

#	ARTICLE	IF	CITATIONS
1	Ge Ion Implanted Photonic Devices and Annealing for Emerging Applications. <i>Micromachines</i> , 2022, 13, 291.	1.4	2
2	Raman enhanced four-wave mixing in silicon core fibers. <i>Optics Letters</i> , 2022, 47, 1626.	1.7	10
3	All-fibre heterogeneously-integrated frequency comb generation using silicon core fibre. <i>Nature Communications</i> , 2022, 13, .	5.8	21
4	Four-Wave Mixing-Based Wavelength Conversion and Parametric Amplification in Submicron Silicon Core Fibers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2021, 27, 1-11.	1.9	22
5	Stimulated Raman Scattering in a Tapered Submicron Silicon Core Fiber. , 2021, , .		0
6	Laser Thermal Processing of Group IV Semiconductors for Integrated Photonic Systems. <i>Advanced Photonics Research</i> , 2021, 2, 2000159.	1.7	7
7	Non-isothermal phase-field simulations of laser-written in-plane SiGe heterostructures for photonic applications. <i>Communications Physics</i> , 2021, 4, .	2.0	4
8	Wide-Band-Gap Metal-Free Perovskite for Third-Order Nonlinear Optics. <i>ACS Photonics</i> , 2021, 8, 2450-2458.	3.2	15
9	Continuous-wave Raman amplification in silicon core fibers pumped in the telecom band. <i>APL Photonics</i> , 2021, 6, .	3.0	16
10	Recent advances in supercontinuum generation in specialty optical fibers [Invited]. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2021, 38, F90.	0.9	59
11	Parametric frequency comb generation using silicon core fiber. , 2021, , .		0
12	Raman Enhanced Four-Wave Mixing in Silicon Core Fibers. , 2021, , .		0
13	Enhanced All-optical Modulation in MoS2-coated Side-polished Fibres. , 2021, , .		0
14	Laser-Driven Phase Segregation and Tailoring of Compositionally Graded Microstructures in Siâ€“Ge Nanoscale Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 9457-9467.	4.0	8
15	Ion Implantation of Germanium Into Silicon for Critical Coupling Control of Racetrack Resonators. <i>Journal of Lightwave Technology</i> , 2020, 38, 1865-1873.	2.7	9
16	A review of nonlinear applications in silicon optical fibers from telecom wavelengths into the mid-infrared spectral region. <i>Optics Communications</i> , 2020, 463, 125437.	1.0	10
17	Hot-wire CVD hydrogenated amorphous silicon for multi-layer photonic applications. , 2020, , .		1
18	Silicon erasable waveguides and directional couplers by germanium ion implantation for configurable photonic circuits. <i>Optics Express</i> , 2020, 28, 17630.	1.7	8

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19	Nonlinear properties of laser-processed polycrystalline silicon waveguides for integrated photonics. Optics Express, 2020, 28, 29192.	1.7	6
20	Laser processed semiconductors for integrated photonic devices -INVITED. EPJ Web of Conferences, 2020, 238, 01001.	0.1	0
21	Laser-Written Silicon-Germanium Alloy Microstructures with Tunable Compositionally Graded Profiles. , 2020, , .		0
22	Silicon core fibers for integrated nonlinear systems. , 2020, , .		0
23	Fiber-integrated phase-change reconfigurable optical attenuator. APL Photonics, 2019, 4, .	3.0	16
24	Net optical parametric gain in a submicron silicon core fiber pumped in the telecom band. APL Photonics, 2019, 4, .	3.0	20
25	Fiber Integrated Wavelength Converter Based on a Silicon Core Fiber With a Nano-Spike Coupler. IEEE Photonics Technology Letters, 2019, 31, 1561-1564.	1.3	10
26	Roadmap on all-optical processing. Journal of Optics (United Kingdom), 2019, 21, 063001.	1.0	128
27	Laser crystallized low-loss polycrystalline silicon waveguides. Optics Express, 2019, 27, 4462.	1.7	10
28	Low-loss silicon core fibre platform for mid-infrared nonlinear photonics. Light: Science and Applications, 2019, 8, 105.	7.7	36
29	Nonlinear optical properties of polycrystalline silicon core fibers from telecom wavelengths into the mid-infrared spectral region. Optical Materials Express, 2019, 9, 1271.	1.6	23
30	Photonic micro-structures produced by selective etching of laser-crystallized amorphous silicon. Optical Materials Express, 2019, 9, 2573.	1.6	4
31	Hot-wire chemical vapor deposition low-loss hydrogenated amorphous silicon waveguides for silicon photonic devices. Photonics Research, 2019, 7, 193.	3.4	14
32	Germanium ion implantation for trimming the coupling efficiency of silicon racetrack resonators. , 2019, , .		2
33	Ion Implantation in Silicon for Trimming the Operating Wavelength of Ring Resonators. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-7.	1.9	53
34	A review of materials engineering in silicon-based optical fibres. Semiconductor Science and Technology, 2018, 33, 023001.	1.0	25
35	Oxyfluoride Core Silica-Based Optical Fiber With Intrinsically Low Nonlinearities for High Energy Laser Applications. Journal of Lightwave Technology, 2018, 36, 284-291.	2.7	12
36	Wavelength Conversion and Supercontinuum Generation in Silicon Optical Fibers. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-9.	1.9	35

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37	Fiberized Silicon Devices for All-Optical Signal Processing. , 2018, , .		0
38	Nonlinear Optics in Semiconductor Optical Fibers. , 2018, , .		1
39	Towards High Speed and Low Power Silicon Photonic Data Links. , 2018, , .		2
40	Perspective: Molten core optical fiber fabricationâ€™A route to new materials and applications. APL Photonics, 2018, 3, 120903.	3.0	64
41	Crystalline GaSb-core optical fibers with room-temperature photoluminescence. Optical Materials Express, 2018, 8, 1435.	1.6	17
42	Optical-resonance-enhanced nonlinearities in a MoS ₂ -coated single-mode fiber. Optics Letters, 2018, 43, 3100.	1.7	12
43	Analysis of Coupling Losses for All-Fiber Integration of Subwavelength Core Hybrid Optical Fibers. IEEE Photonics Journal, 2018, 10, 1-12.	1.0	7
44	Advancing silicon photonics by germanium ion implantation into silicon. , 2018, , .		1
45	Octave-spanning supercontinuum generation in a dispersion managed tapered crystalline silicon core fiber. , 2018, , .		3
46	Interfacing Telecom Fibers and Silicon Core Fibers with Nano-Spikes for In-Fiber Silicon Devices. , 2018, , .		0
47	Future of Semiconductor-core Optical Fibers. , 2018, , .		0
48	Germanium implanted photonic devices for post-fabrication trimming and programmable circuits. , 2018, , .		1
49	A Tuneable Multi-Core to Single Mode Fiber Coupler. IEEE Photonics Technology Letters, 2017, 29, 591-594.	1.3	9
50	Germanium Mid-Infrared Photonic Devices. Journal of Lightwave Technology, 2017, 35, 624-630.	2.7	76
51	Laser-induced ferroelectric domain engineering in LiNbO ₃ crystals using an amorphous silicon overlayer. Journal of Optics (United Kingdom), 2017, 19, 084010.	1.0	1
52	Phase trimming of Mach-Zehnder interferometers by laser annealing of germanium implanted waveguides. , 2017, , .		0
53	Tapered silicon core fibers with nano-spikes for optical coupling via spliced silica fibers. Optics Express, 2017, 25, 24157.	1.7	44
54	Material properties of tapered crystalline silicon core fibers. Optical Materials Express, 2017, 7, 2055.	1.6	38

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55	Post-fabrication phase trimming of Mach-Zehnder interferometers by laser annealing of germanium implanted waveguides. <i>Photonics Research</i> , 2017, 5, 578.	3.4	29
56	Highly nonlinear yttrium-aluminosilicate optical fiber with a high intrinsic stimulated Brillouin scattering threshold. <i>Optics Letters</i> , 2017, 42, 4849.	1.7	14
57	Laser Annealing of Low Temperature Deposited Silicon Waveguides. , 2017, , .		1
58	Graphene-Based Fiber Polarizer With PVB-Enhanced Light Interaction. <i>Journal of Lightwave Technology</i> , 2016, 34, 3563-3567.	2.7	25
59	CO ₂ Laser-Induced Directional Recrystallization to Produce Single Crystal Silicon-Core Optical Fibers with Low Loss. <i>Advanced Optical Materials</i> , 2016, 4, 1004-1008.	3.6	87
60	Semiconductor optical fibres for infrared applications: A review. <i>Semiconductor Science and Technology</i> , 2016, 31, 103004.	1.0	30
61	Laser recrystallization and inscription of compositional microstructures in crystalline SiGe-core fibres. <i>Nature Communications</i> , 2016, 7, 13265.	5.8	91
62	Enhanced all-optical modulation in a graphene-coated fibre with low insertion loss. <i>Scientific Reports</i> , 2016, 6, 23512.	1.6	43
63	Group IV compounds for integrated photonic applications. , 2016, , .		1
64	Crystalline Silicon Optical Fibers with Low Optical Loss. <i>ACS Photonics</i> , 2016, 3, 378-384.	3.2	34
65	Semiconductor optical fibers for nonlinear applications. , 2016, , .		1
66	Silicon optical fibres – past, present, and future. <i>Advances in Physics: X</i> , 2016, 1, 114-127.	1.5	38
67	Tapered polysilicon core fibers for nonlinear photonics. <i>Optics Letters</i> , 2016, 41, 1360.	1.7	51
68	The time is right for multiphoton entangled states. <i>Science</i> , 2016, 351, 1152-1153.	6.0	8
69	Silicon and germanium mid-infrared photonics. <i>Proceedings of SPIE</i> , 2016, , .	0.8	1
70	Silicon photonics: some remaining challenges. <i>Proceedings of SPIE</i> , 2016, , .	0.8	0
71	Programmable long-period grating in a liquid core optical fiber. <i>Optics Letters</i> , 2016, 41, 4763.	1.7	5
72	In-fiber all-optical modulation based on an enhanced light-matter interaction with graphene. , 2016, , .		0

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73	Functionalized optical fibers for non-linear optics. , 2016, , .		1
74	A multi-core fiber to single-mode fiber side-polished coupler. , 2016, , .		1
75	Tunable continuous wave emission via phase-matched second harmonic generation in a ZnSe microcylindrical resonator. Scientific Reports, 2015, 5, 11798.	1.6	16
76	Kerr nonlinear switching in a core-shell microspherical resonator fabricated from the silicon fiber platform. , 2015, , .		1
77	Hydrogenated Amorphous Germanium Optical Fiber. , 2015, , .		2
78	High-speed detection at two micrometres with monolithic silicon photodiodes. Nature Photonics, 2015, 9, 393-396.	15.6	192
79	Templated growth of II-VI semiconductor optical fiber devices and steps towards infrared fiber lasers. Proceedings of SPIE, 2015, , .	0.8	1
80	Group IV mid-IR photonics. , 2015, , .		0
81	Germanium-on-silicon platforms for nonlinear photonics in the mid-infrared. , 2015, , .		0
82	Group IV mid-infrared photonics. , 2015, , .		0
83	Mid-infrared all-optical modulation in low-loss germanium-on-silicon waveguides. Optics Letters, 2015, 40, 268.	1.7	74
84	Kerr nonlinear switching in a hybrid silica-silicon microspherical resonator. Optics Express, 2015, 23, 17263.	1.7	32
85	Two-photon absorption and all-optical modulation in germanium-on-silicon waveguides for the mid-infrared. Optics Letters, 2015, 40, 2213.	1.7	27
86	All-optical Modulation in Germanium-on-silicon Waveguides in the Mid-infrared. , 2015, , .		0
87	Yb-fiber amplifier pumped idler-resonant PPLN optical parametric oscillator producing 90 femtosecond pulses with high beam quality. Applied Physics B: Lasers and Optics, 2014, 117, 987-993.	1.1	13
88	Optical detection and modulation at 2 μ m-25 μ m in silicon. Optics Express, 2014, 22, 10825.	1.7	48
89	Long-wavelength silicon photonic integrated circuits. , 2014, , .		0
90	Silicon-Based Photonic Integration Beyond the Telecommunication Wavelength Range. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 394-404.	1.9	106

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91	Four-wave mixing and octave-spanning supercontinuum generation in a small core hydrogenated amorphous silicon fiber pumped in the mid-infrared. <i>Optics Letters</i> , 2014, 39, 5721.	1.7	42
92	Extreme electronic bandgap modification in laser-crystallized silicon optical fibres. <i>Nature Materials</i> , 2014, 13, 1122-1127.	13.3	94
93	Locally Erasable Couplers for Optical Device Testing in Silicon on Insulator. <i>Journal of Lightwave Technology</i> , 2014, 32, 2248-2253.	2.7	26
94	Semiconductor optical fibres: progress and opportunities. <i>Laser and Photonics Reviews</i> , 2014, 8, 53-72.	4.4	72
95	Erasable diffractive grating couplers in silicon on insulator for wafer scale testing. , 2014, , .		1
96	Laser crystallization of silicon on lithium niobate. , 2014, , .		1
97	Hydrogenated Amorphous Silicon Microcylindrical Resonators for Ultrafast Modulation. , 2014, , .		0
98	Mid-IR heterogeneous silicon photonics. <i>Proceedings of SPIE</i> , 2013, , .	0.8	2
99	Whispering gallery modes in semiconductor optical fibres and optical bottle microresonators. , 2013, , .		1
100	Conformal Coating by High Pressure Chemical Deposition for Patterned Microwires of II-VI Semiconductors. <i>Advanced Functional Materials</i> , 2013, 23, 1647-1654.	7.8	21
101	Integration of Optical Fiber and Optoelectronic Devices. , 2013, , .		2
102	Nonlinear transmission properties of hydrogenated amorphous silicon core fibers towards the mid-infrared regime. <i>Optics Express</i> , 2013, 21, 13075.	1.7	37
103	Integrated hollow-core fibers for nonlinear optofluidic applications. <i>Optics Express</i> , 2013, 21, 28751.	1.7	24
104	Silicon-based heterogeneous photonic integrated circuits for the mid-infrared. <i>Optical Materials Express</i> , 2013, 3, 1523.	1.6	65
105	Ultrafast optical control using the Kerr nonlinearity in hydrogenated amorphous silicon microcylindrical resonators. <i>Scientific Reports</i> , 2013, 3, 2885.	1.6	54
106	Laser crystallisation of semiconductor core optical fibres. , 2013, , .		1
107	Tapered liquid-core all-fibre devices for low-threshold Raman generation. , 2013, , .		0
108	Mid-infrared photonics devices in SOI. <i>Proceedings of SPIE</i> , 2013, , .	0.8	5

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109	Group IV platforms for the mid-infrared. Proceedings of SPIE, 2013, , .	0.8	0
110	Mid-IR soliton compression in silicon optical fibers and fiber tapers. Optics Letters, 2012, 37, 818.	1.7	10
111	Nonlinear pulse dynamics in multimode silicon core optical fibers. Optics Letters, 2012, 37, 3351.	1.7	28
112	Thermal nonlinearity in silicon microcylindrical resonators. Applied Physics Letters, 2012, 100, 181101.	1.5	9
113	Ultrafast wavelength conversion via cross-phase modulation in hydrogenated amorphous silicon optical fibers. Optics Express, 2012, 20, 26110.	1.7	31
114	Effect of Core Size on Nonlinear Transmission in Silicon Optical Fibers. , 2012, , .		1
115	Characterization of Thermal Induced Nonlinear Effects in Silicon Microcylindrical Resonators. , 2012, , .		0
116	Confined High-Pressure Chemical Deposition of Hydrogenated Amorphous Silicon. Journal of the American Chemical Society, 2012, 134, 19-22.	6.6	56
117	Nonlinear optics in tapered silicon fibres. Proceedings of SPIE, 2012, , .	0.8	0
118	Integration of gigahertz-bandwidth semiconductor devices inside microstructured optical fibres. Nature Photonics, 2012, 6, 174-179.	15.6	107
119	Demonstration of Kerr Nonlinearity in Silicon Microcylindrical Resonators. , 2012, , .		1
120	Spontaneous Waveguide Raman Spectroscopy of Self-Assembled Monolayers in Silica Micropores. Langmuir, 2011, 27, 630-636.	1.6	6
121	Selective Semiconductor Filling of Microstructured Optical Fibers. Journal of Lightwave Technology, 2011, 29, 2005-2008.	2.7	13
122	Guiding properties of large mode area silicon microstructured fibers: a route to effective single mode operation. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 1529.	0.9	15
123	High index contrast semiconductor ARROW and hybrid ARROW fibers. Optics Express, 2011, 19, 10979.	1.7	22
124	All-optical modulation using two-photon absorption in silicon core optical fibers. Optics Express, 2011, 19, 19078.	1.7	51
125	Polycrystalline silicon optical fibers with atomically smooth surfaces. Optics Letters, 2011, 36, 2480.	1.7	22
126	Ultra-smooth microcylindrical resonators fabricated from the silicon optical fiber platform. Applied Physics Letters, 2011, 99, 031117.	1.5	19

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127	Zinc Selenide Optical Fibers. <i>Advanced Materials</i> , 2011, 23, 1647-1651.	11.1	108
128	Nonlinear absorption and self-phase modulation in silicon optical fibres. , 2011, , .		0
129	Taper designs for semiconductor filled fibres. , 2011, , .		0
130	Experimental observation of whispering gallery modes in novel silicon microcylindrical resonators. , 2011, , .		0
131	ARROW guiding silicon photonic crystal fibres. , 2011, , .		0
132	Nonlinearities in Silicon Optical Fibers. , 2011, , .		0
133	Integration of Semiconductors, Molecules, and Metals into Microstructured Optical Fibers. , 2010, , .		0
134	Low Loss Amorphous Silicon Microstructured Optical Fiber with Large Mode Area Behavior. , 2010, , .		0
135	High-Pressure Chemical Deposition for Void-Free Filling of Extreme Aspect Ratio Templates. <i>Advanced Materials</i> , 2010, 22, 4605-4611.	11.1	26
136	Mid-infrared transmission properties of amorphous germanium optical fibers. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	40
137	Low loss silicon fibers for photonics applications. <i>Applied Physics Letters</i> , 2010, 96, 041105.	1.5	75
138	Tapered silicon optical fibers. <i>Optics Express</i> , 2010, 18, 7596.	1.7	36
139	Ultra-smooth lithium niobate photonic micro-structures by surface tension reshaping. <i>Optics Express</i> , 2010, 18, 11508.	1.7	24
140	Nonlinear transmission properties of hydrogenated amorphous silicon core optical fibers. <i>Optics Express</i> , 2010, 18, 16826.	1.7	65
141	Parabolic pulse generation in tapered silicon fibers. <i>Optics Letters</i> , 2010, 35, 1780.	1.7	25
142	Soliton propagation in tapered silicon core fibers. <i>Optics Letters</i> , 2010, 35, 3697.	1.7	43
143	Wavelength-dependent loss measurements in polysilicon modified optical fibres. , 2009, , .		0
144	Large mode area silicon microstructured fiber with robust dual mode guidance. <i>Optics Express</i> , 2009, 17, 18076.	1.7	35

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145	Simultaneous tapering and crystallisation of silicon core optical fibres. , 2009, , .		0
146	Silver nanoparticle impregnated polycarbonate substrates for plasmonic applications. , 2009, , .		1
147	Ultra-smooth lithium niobate single crystal photonic micro-structures. , 2009, , .		0
148	Silver Nanoparticle Impregnated Polycarbonate Substrates for Surface Enhanced Raman Spectroscopy. Advanced Functional Materials, 2008, 18, 1265-1271.	7.8	89
149	Time and spectrally resolved enhanced fluorescence using silver nanoparticle impregnated polycarbonate substrates. Applied Physics Letters, 2008, 93, .	1.5	2
150	Loss measurements of microstructured optical fibres with metal-nanoparticle inclusions. Electronics Letters, 2008, 44, 795.	0.5	1
151	Highly efficient surface enhanced Raman scattering using microstructured optical fibers with enhanced plasmonic interactions. Applied Physics Letters, 2008, 92, .	1.5	23
152	Surface-Enhanced Raman Spectroscopy using silver impregnated polycarbonate substrates. , 2007, , .		0
153	Design Considerations for the Manufacture of Temperature-Stable Periodically-Poled Nonlinear Crystals. , 2007, , .		0
154	Highly efficient SERS inside microstructured optical fibres via optical mode engineering. , 2007, , .		0
155	Flat-top temperature tuning response in periodically-poled nonlinear crystals. , 2007, , .		0
156	Surface-Enhanced Raman Scattering Using Microstructured Optical Fiber Substrates. Advanced Functional Materials, 2007, 17, 2024-2030.	7.8	97
157	Surface Enhanced Raman Scattering using Metal Modified Microstructured Optical Fibre Substrates. , 2006, , .		2
158	Surface enhanced Raman scattering using metal modified microstructured optical fiber substrates. , 2006, , .		2
159	Harmonic generation in a two-dimensional nonlinear quasi-crystal. Optics Letters, 2005, 30, 424.	1.7	53
160	Exact solutions of the generalized nonlinear Schrödinger equation with distributed coefficients. Physical Review E, 2005, 71, 056619.	0.8	160
161	Kruglov et al. Reply. Physical Review Letters, 2004, 92, .	2.9	11
162	Numerical study of parabolic pulse generation in microstructured fibre Raman amplifiers. Optics Communications, 2003, 218, 167-172.	1.0	23

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163	Exact Self-Similar Solutions of the Generalized Nonlinear Schrödinger Equation with Distributed Coefficients. <i>Physical Review Letters</i> , 2003, 90, 113902.	2.9	476
164	Guided modes in channel waveguides with a negative index of refraction. <i>Optics Express</i> , 2003, 11, 2502.	1.7	48
165	Second-harmonic generation in hexagonally-poled lithium niobate slab waveguides. <i>Electronics Letters</i> , 2003, 39, 75.	0.5	7
166	Self-similar propagation of parabolic pulses in normal-dispersion fiber amplifiers. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2002, 19, 461.	0.9	255
167	Solitary pulse propagation in high gain optical fiber amplifiers with normal group velocity dispersion. <i>Optics Communications</i> , 2002, 206, 171-177.	1.0	52
168	The cancellation of nonlinear and dispersive phase components on the fundamental optical fiber soliton: a pedagogical note. <i>Optics Communications</i> , 2001, 193, 253-259.	1.0	12
169	Parabolic similariton pulses in high gain fiber amplifiers with arbitrary longitudinal gain profiles. , 2001, , .		0
170	Self-similar propagation of high-power parabolic pulses in optical fiber amplifiers. <i>Optics Letters</i> , 2000, 25, 1753.	1.7	222
171	Generation and interaction of parabolic pulses in high gain fiber amplifiers and oscillators. , 0, , .		9
172	The parabolic pulse-solitary wave transition in optical fiber amplifiers. , 0, , .		0
173	Analytical solutions of the nonlinear Schrodinger equation with gain [optical solitons]. , 0, , .		0