John Ballato

List of Publications by Year
in descending order

234 papers	7,304 citations	61984 43 h-index	74163 75 g-index
239 all docs	239 docs citations	239 times ranked	5212 citing authors

#	Article	IF	Citations
1	The uniqueness of glass for passive thermal management for optical fibers. International Journal of Applied Glass Science, 2022, 13, 267-280.	2.0	6
2	A Novel Route to Fibers with Incongruent and Volatile Crystalline Semiconductor Cores: GaAs. ACS Photonics, 2022, 9, 1058-1064.	6.6	11
3	Anti-Stokes cooling and other thermal managements techniques in fiber lasers and amplifiers. , 2022, , .		0
4	Optical characterization of disordered Yb-doped silica glass Anderson localizing optical fiber. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 1272.	2.1	0
5	Raman enhanced four-wave mixing in silicon core fibers. Optics Letters, 2022, 47, 1626.	3.3	10
6	Anti-Stokes fluorescence cooling of nanoparticle-doped silica fibers. Optics Letters, 2022, 47, 2590.	3.3	8
7	Localised structuring of metal-semiconductor cores in silica clad fibres using laser-driven thermal gradients. Nature Communications, 2022, 13, 2680.	12.8	9
8	3D Laser Engineering of Molten Core Optical Fibers: Toward a New Generation of Harsh Environment Sensing Devices. Advanced Optical Materials, 2022, 10, .	7.3	13
9	All-fibre heterogeneously-integrated frequency comb generation using silicon core fibre. Nature Communications, 2022, 13, .	12.8	21
10	Four-Wave Mixing-Based Wavelength Conversion and Parametric Amplification in Submicron Silicon Core Fibers. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-11.	2.9	22
11	Glass: The carrier of lightâ€"Part IIâ€"A brief look into the future of optical fiber. International Journal of Applied Glass Science, 2021, 12, 3-24.	2.0	20
12	Stimulated Raman Scattering in a Tapered Submicron Silicon Core Fiber. , 2021, , .		0
13	All-optical high-speed modulation of THz transmission through silicon core optical fibers. Optics Express, 2021, 29, 3543.	3.4	14
14	Semiconductor core fibres: materials science in a bottle. Nature Communications, 2021, 12, 3990.	12.8	24
15	Thermal Stability of Type II Modifications by IR Femtosecond Laser in Highly-Doped Aluminosilicate Glass Optical Fibers. , 2021, , .		0
16	Laser sintering and influence of the Dy concentration on $BaAl_2O_4:Eu^{2+}, Dy^{3+}$ persistent luminescence ceramics. Journal of the European Ceramic Society, 2021, 41, 3629-3634.	5.7	9
17	Radiation-balanced silica fiber laser. Optica, 2021, 8, 830.	9.3	27
18	Core opportunities for future optical fibers. JPhys Photonics, 2021, 3, 041001.	4.6	3

#	Article	IF	Citations
19	Concentration quenching and clustering effects in Er:YAG-derived all-glass optical fiber. Optical Materials Express, 2021, 11, 3587.	3.0	5
20	Continuous-wave Raman amplification in silicon core fibers pumped in the telecom band. APL Photonics, 2021, 6, .	5.7	16
21	Kilowatt power scaling of an intrinsically low Brillouin and thermo-optic Yb-doped silica fiber [Invited]. Journal of the Optical Society of America B: Optical Physics, 2021, 38, F38.	2.1	11
22	On the origin of photodarkening resistance in Yb-doped silica fibers with high aluminum concentration. Optical Materials Express, 2021, 11, 115.	3.0	9
23	Parametric frequency comb generation using silicon core fiber. , 2021, , .		0
24	Reduced quantum defect in a Yb-doped fiber laser by balanced dual-wavelength excitation. Applied Physics Letters, 2021, 119, .	3.3	8
25	All-optically-driven and All-optical-fiber Vacuum Gauge via Ytterbium-doped Optical Fiber Microheater. , 2021, , .		0
26	Review of a Decade of Research on Disordered Anderson Localizing Optical Fibers. Frontiers in Physics, 2021, 9, .	2.1	4
27	Stokes and anti-Stokes pumped Yb-doped fiber lasers. , 2021, , .		0
28	Power Scaling of Diffraction-Limited, Narrow-Linewidth Fiber Lasers to Beyond 10 kW. , 2020, , .		0
29	Sellmeier circuits: A unifying view on optical and plasma dispersion fitting formulas. Journal of Applied Physics, 2020, 128, .	2.5	1
30	Robinsonâ€"Martin: Relating the 4Â¯3m and 6mm nonlinear piezoelectric tensors. AIP Advances, 2020, 10, 095321.	1.3	1
31	Phase separation and transformation of binary immiscible systems in molten core-derived optical fibers. MRS Communications, 2020, 10, 298-304.	1.8	5
32	All optical fiber thermal vacuum gauge. JPhys Photonics, 2020, 2, 014006.	4.6	2
33	Effect of the Ce3+ concentration on laser-sintered YAG ceramics for white LEDs applications. Journal of the European Ceramic Society, 2020, 40, 3673-3678.	5.7	33
34	Designing silicon-core fiber tapers for efficient supercontinuum generation in the greenhouse gas absorption region. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 1698.	2.1	1
35	Random lasing from optical fibers with phase separated glass cores. Optics Express, 2020, 28, 22049.	3.4	12
36	Laser cooling in a silica optical fiber at atmospheric pressure. Optics Letters, 2020, 45, 1092.	3.3	43

#	Article	IF	Citations
37	Observation of optical nonlinearities in an all-solid transverse Anderson localizing optical fiber. Optics Letters, 2020, 45, 599.	3.3	7
38	Experimental comparison of silica fibers for laser cooling. Optics Letters, 2020, 45, 4020.	3.3	28
39	CO₂ laser annealed SiGe core optical fibers with radial Ge concentration gradients. Optical Materials Express, 2020, 10, 926.	3.0	16
40	Thermo-optic coefficient of B₂O₃ and GeO₂ co-doped silica fibers. Optical Materials Express, 2020, 10, 1509.	3.0	11
41	Broadband infrared and THz transmitting silicon core optical fiber. Optical Materials Express, 2020, 10, 2491.	3.0	13
42	On the morphologies of oxides particles in optical fibers: Effect of the drawing tension and composition. Optical Materials, 2019, 87, 74-79.	3.6	20
43	Investigation of the structural environment and chemical bonding of fluorine in Yb-doped fluorosilicate glass optical fibres. Journal of Chemical Thermodynamics, 2019, 128, 119-126.	2.0	11
44	Overview of high temperature fibre Bragg gratings and potential improvement using highly doped aluminosilicate glass optical fibres. JPhys Photonics, 2019, 1, 042001.	4.6	22
45	Optical Fiber Materials: feature introduction. Optical Materials Express, 2019, 9, 3565.	3.0	1
46	AlPO₄ in Silica Glass Optical Fibers: Deduction of Additional Material Properties. IEEE Photonics Journal, 2019, 11, 1-13.	2.0	5
47	Insights and Aspects to the Modeling of the Molten Core Method for Optical Fiber Fabrication. Materials, 2019, 12, 2898.	2.9	16
48	Disordered Anderson Localization Optical Fibers for Image Transportâ€"A Review. Journal of Lightwave Technology, 2019, 37, 5652-5659.	4.6	20
49	Net optical parametric gain in a submicron silicon core fiber pumped in the telecom band. APL Photonics, 2019, 4, .	5.7	20
50	Fiber Integrated Wavelength Converter Based on a Silicon Core Fiber With a Nano-Spike Coupler. IEEE Photonics Technology Letters, 2019, 31, 1561-1564.	2.5	10
51	Laser restructuring and photoluminescence of glass-clad GaSb/Si-core optical fibres. Nature Communications, 2019, 10, 1790.	12.8	27
52	Novel reactive molten core fabrication employing in-situ metal oxidation: Erbium-doped intrinsically low Brillouin scattering optical fiber. Optical Materials: X, 2019, 1, 100009.	0.8	2
53	Study of La-doped barium titanate ceramics obtained by laser sintering technique. Journal of Electroceramics, 2019, 42, 98-103.	2.0	5
54	Structural, microstructural, and luminescent properties of laser-sintered Eu-doped YAG ceramics. Optical Materials, 2019, 89, 334-339.	3.6	13

#	ARTICLE	IF	CITATIONS
55	A Materials Approach Toward the Mitigation of Nonlinearities in Glass Optical Fibers. , 2019, , .		1
56	Low-loss silicon core fibre platform for mid-infrared nonlinear photonics. Light: Science and Applications, 2019, 8, 105.	16.6	36
57	Observation and practical implications of nanoâ€scale phase separation in aluminosilicate glass optical fibers. Journal of the American Ceramic Society, 2019, 102, 879-883.	3.8	11
58	Laser sintering and photoluminescence study of Tb-doped yttrium aluminum garnet ceramics. Ceramics International, 2019, 45, 3797-3802.	4.8	13
59	Nonlinear optical properties of polycrystalline silicon core fibers from telecom wavelengths into the mid-infrared spectral region. Optical Materials Express, 2019, 9, 1271.	3.0	23
60	Calcium silicate and fluorosilicate optical fibers for high energy laser applications. Optical Materials Express, 2019, 9, 2147.	3.0	6
61	Advances in the fabrication of disordered transverse Anderson localizing optical fibers [Invited]. Optical Materials Express, 2019, 9, 2769.	3.0	8
62	Ge-capped SiGe core optical fibers. Optical Materials Express, 2019, 9, 4301.	3.0	13
63	Materials Development for Advanced OpticalÂFiber Sensors and Lasers. , 2019, , 1301-1333.		0
64	Athermal Optical Fibers for Sensing Applications. , 2019, , .		1
65	Materials Development for Advanced Optical Fiber Sensors and Lasers. , 2018, , 1-33.		0
66	A unified materials approach to mitigating optical nonlinearities in optical fiber. III. Canonical examples and materials road map. International Journal of Applied Glass Science, 2018, 9, 447-470.	2.0	24
67	The linear and nonlinear refractive index of amorphous Al₂O₃ deduced from aluminosilicate optical fibers. International Journal of Applied Glass Science, 2018, 9, 421-427.	2.0	11
68	Oxyfluoride Core Silica-Based Optical Fiber With Intrinsically Low Nonlinearities for High Energy Laser Applications. Journal of Lightwave Technology, 2018, 36, 284-291.	4.6	12
69	Wavelength Conversion and Supercontinuum Generation in Silicon Optical Fibers. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-9.	2.9	35
70	A unified materials approach to mitigating optical nonlinearities in optical fiber. II. A. Material additivity models and basic glass properties. International Journal of Applied Glass Science, 2018, 9, 278-287.	2.0	26
71	A unified materials approach to mitigating optical nonlinearities in optical fiber. <scp>II</scp>. B. The optical fiber, material additivity and the nonlinear coefficients. International Journal of Applied Glass Science, 2018, 9, 307-318.	2.0	25
72	A unified materials approach to mitigating optical nonlinearities in optical fiber. I. Thermodynamics of optical scattering. International Journal of Applied Glass Science, 2018, 9, 263-277.	2.0	23

#	Article	IF	Citations
73	Characterisation of silicon fibre Bragg grating in nearâ€infrared band for strain and temperature sensing. Electronics Letters, 2018, 54, 1393-1395.	1.0	9
74	Optimizing thermal conduction in bulk polycrystalline SrTiO3âˆ’Î´ ceramics via oxygen non-stoichiometry. MRS Communications, 2018, 8, 1470-1476.	1.8	9
75	Perspective: Molten core optical fiber fabricationâ€”A route to new materials and applications. APL Photonics, 2018, 3, 120903.	5.7	64
76	A Brief Review of Specialty Optical Fibers for Brillouin-Scattering-Based Distributed Sensors. Applied Sciences (Switzerland), 2018, 8, 1996.	2.5	20
77	Materials for optical fiber lasers: A review. Applied Physics Reviews, 2018, 5, .	11.3	131
78	A nano shell game. Nature Photonics, 2018, 12, 501-502.	31.4	0
79	Less than 1% quantum defect fiber lasers via ytterbium-doped multicomponent fluorosilicate optical fiber. Optics Letters, 2018, 43, 3096.	3.3	31
80	Ytterbium-doped multicomponent fluorosilicate optical fibers with intrinsically low optical nonlinearities. Optical Materials Express, 2018, 8, 744.	3.0	16
81	Crystalline GaSb-core optical fibers with room-temperature photoluminescence. Optical Materials Express, 2018, 8, 1435.	3.0	17
82	Molten core fabrication of bismuth germanium oxide Bi₄Ge₃O₁₂ crystalline core fibers. Journal of the American Ceramic Society, 2018, 101, 4340-4349.	3.8	9
83	Reduced loss in SiGe-core optical fibers. , 2018, , .		1
84	Low Quantum Defect Fiber Lasers via Yb-Doped Multicomponent Fluorosilicate Optical Fiber. , 2018, , .		3
85	Fiber integrated silicon photonics. , 2018, , .		0
86	Tailoring the Thermo-Optic Coefficient in Silica Optical Fibers. , 2018, , .		2
87	Future of Semiconductor-core Optical Fibers. , 2018, , .		0
88	Fiberâ€drawâ€induced elongation and breakâ€up of particles inside the core of a silicaâ€based optical fiber. Journal of the American Ceramic Society, 2017, 100, 1814-1819.	3.8	38
89	Use of thulium-doped LaF3 nanoparticles to lower the phonon energy of the thulium's environment in silica-based optical fibres. Optical Materials, 2017, 68, 24-28.	3.6	39
90	Random lasing in an Anderson localizing optical fiber. Light: Science and Applications, 2017, 6, e17041-e17041.	16.6	83

#	Article	IF	Citations
91	Deduced elasticity of sp3-bonded amorphous diamond. Applied Physics Letters, 2017, 111, .	3.3	7
92	Laser sintering of persistent luminescent CaAl2O4:Eu2+Dy3+ ceramics. Optical Materials, 2017, 68, 2-6.	3.6	27
93	Specialty optical fiber materials and fabrication techniques for lasers. , 2017, , .		0
94	Nanoparticle doping for high power fiber lasers at eye-safer wavelengths. Optics Express, 2017, 25, 13903.	3.4	59
95	Tapered silicon core fibers with nano-spikes for optical coupling via spliced silica fibers. Optics Express, 2017, 25, 24157.	3.4	44
96	Additivity of the coefficient of thermal expansion in silicate optical fibers. Optics Letters, 2017, 42, 3650.	3.3	40
97	Laser structuring, stress modification and Bragg grating inscription in silicon-core glass fibers. Optical Materials Express, 2017, 7, 1589.	3.0	43
98	On the thermo-optic coefficient of P_2O_5 in SiO_2. Optical Materials Express, 2017, 7, 3654.	3.0	19
99	Highly nonlinear yttrium-aluminosilicate optical fiber with a high intrinsic stimulated Brillouin scattering threshold. Optics Letters, 2017, 42, 4849.	3.3	14
100	Glass and Process Development for the Next Generation of Optical Fibers: A Review. Fibers, 2017, 5, 11.	4.0	50
101	Silicon fibre nano-spike for robust coupling to silica fibres. , 2017, , .		2
102	On the Anomalously Strong Dependence of the Acoustic Velocity of Alumina on Temperature in Aluminosilicate Glass Optical Fibersâ€"Part <scp>II</scp>: Acoustic Properties of Alumina and Silica Polymorphs, and Approximations of the Glassy State. International Journal of Applied Glass Science, 2016, 7, 11-26.	2.0	7
103	Temperature-Dependence of Multiphonon Relaxation of Rare-Earth Ions in Solid-State Hosts. Journal of Physical Chemistry C, 2016, 120, 9958-9964.	3.1	45
104	On the Anomalously Strong Dependence of the Acoustic Velocity of Alumina on Temperature in Aluminosilicate Glass Optical Fibersâ€"Part I: Material Modeling and Experimental Validation. International Journal of Applied Glass Science, 2016, 7, 3-10.	2.0	11
105	CO₂ Laserâ€Induced Directional Recrystallization to Produce Single Crystal Siliconâ€Core Optical Fibers with Low Loss. Advanced Optical Materials, 2016, 4, 1004-1008.	7.3	87
106	Laser recrystallization and inscription of compositional microstructures in crystalline SiGe-core fibres. Nature Communications, 2016, 7, 13265.	12.8	91
107	Glass: The Carrier of Light â€•A Brief History of Optical Fiber. International Journal of Applied Glass Science, 2016, 7, 413-422.	2.0	28
108	Effects of Sintering Temperature on Openâ€Volume Defects and Thermoluminescence of Yttria and Lutetia Ceramics. Journal of the American Ceramic Society, 2016, 99, 1449-1454.	3.8	4

#	Article	IF	Citations
109	Translucent and persistent luminescent SrAl2O4:Eu2+Dy3+ ceramics. Ceramics International, 2016, 42, 4306-4312.	4.8	35
110	Brillouin Properties of a Novel Strontium Aluminosilicate Glass Optical Fiber. Journal of Lightwave Technology, 2016, 34, 1435-1441.	4.6	27
111	Silicon optical fibres â€" past, present, and future. Advances in Physics: X, 2016, 1, 114-127.	4.1	38
112	Tapered polysilicon core fibers for nonlinear photonics. Optics Letters, 2016, 41, 1360.	3.3	51
113	Athermal distributed Brillouin sensors utilizing all-glass optical fibers fabricated from rare earth garnets: LuAG. New Journal of Physics, 2016, 18, 015004.	2.9	11
114	Tunable continuous wave emission via phase-matched second harmonic generation in a ZnSe microcylindrical resonator. Scientific Reports, 2015, 5, 11798.	3.3	16
115	Pockels Coefficients in Multicomponent Oxide Glasses. International Journal of Applied Glass Science, 2015, 6, 387-396.	2.0	12
116	Single- and few-moded lithium aluminosilicate optical fiber for athermal Brillouin strain sensing. Optics Letters, 2015, 40, 5030.	3.3	25
117	Infrared Spectroscopic Characterization of Photoluminescent Polymer Nanocomposites. Journal of Spectroscopy, 2015, 2015, 1-9.	1.3	33
118	Rethinking optical fiber. , 2015, , .		0
119	Investigation of Er-doped Sc2O3 transparent ceramics by positron annihilation spectroscopy. Journal of Materials Science, 2015, 50, 3183-3188.	3.7	16
120	Type I and II Bragg gratings made with infrared femtosecond radiation in high and low alumina content aluminosilicate optical fibers. Optica, 2015, 2, 313.	9.3	38
121	Kerr nonlinear switching in a hybrid silica-silicon microspherical resonator. Optics Express, 2015, 23, 17263.	3.4	32
122	Infrared fibers. Advances in Optics and Photonics, 2015, 7, 379.	25.5	274
123	Light trapping in horizontally aligned silicon microwire solar cells. Optics Express, 2015, 23, A1463.	3.4	22
124	Materials Development for Next Generation Optical Fiber. Materials, 2014, 7, 4411-4430.	2.9	48
125	Transverse Anderson Localization in Disordered Glass Optical Fibers: A Review. Materials, 2014, 7, 5520-5527.	2.9	9
126	Novel Brillouin- and Raman-suppressing optical fibers. , 2014, , .		0

#	Article	IF	Citations
127	Anderson localisation in fibres. , 2014, , .		1
128	Compositional tuning of glass for the suppression of nonlinear and parasitic fiber laser phenomena. Proceedings of SPIE, 2014, , .	0.8	0
129	Nearâ€Infrared and Upconversion Luminescence in Er:Y₂O₃ Ceramics under 1.5ÂÎ¼m Excitation. Journal of the American Ceramic Society, 2014, 97, 2105-2110.	3.8	35
130	Four-wave mixing and octave-spanning supercontinuum generation in a small core hydrogenated amorphous silicon fiber pumped in the mid-infrared. Optics Letters, 2014, 39, 5721.	3.3	42
131	Brillouin scattering properties of lanthanoâ€“aluminosilicate optical fiber. Applied Optics, 2014, 53, 5660.	1.8	24
132	Image transport through a disordered optical fibre mediated by transverse Anderson localization. Nature Communications, 2014, 5, 3362.	12.8	118
133	Correlation between native As2Se3 preform purity and glass optical fiber mechanical strength. Materials Research Bulletin, 2014, 49, 250-258.	5.2	8
134	Bulk fabrication and properties of solar grade silicon microwires. APL Materials, 2014, 2, 116108.	5.1	13
135	The effects of thermal processing on the luminescence of Y2O3:Tm transparent ceramic. , 2014, , .		0
136	Silicon-core glass fibres as microwire radial-junction solar cells. Scientific Reports, 2014, 4, 6283.	3.3	52
137	120 Years of Optical Glass Science. Optics and Photonics News, 2014, 25, 44.	0.5	13
138	Rethinking Optical Fiber: New Demands, Old Glasses. Journal of the American Ceramic Society, 2013, 96, 2675-2692.	3.8	99
139	Mid-infrared Raman sources using spontaneous Raman scattering in germanium core optical fibers. Applied Physics Letters, 2013, 102, .	3.3	18
140	Chirped rectilinear core longitudinally-graded optical fibers. Optical Fiber Technology, 2013, 19, 432-436.	2.7	1
141	The Brillouin gain coefficient of Yb-doped aluminosilicate glass optical fibers. Optical Materials, 2013, 35, 1627-1632.	3.6	27
142	Brillouin spectroscopy of a novel baria-doped silica glass optical fiber. Optics Express, 2013, 21, 10924.	3.4	48
143	Nonlinear transmission properties of hydrogenated amorphous silicon core fibers towards the mid-infrared regime. Optics Express, 2013, 21, 13075.	3.4	37
144	Spinel-derived single mode optical fiber. Optical Materials Express, 2013, 3, 511.	3.0	28

#	Article	IF	Citations
145	Pockelsâ€™ coefficients of alumina in aluminosilicate optical fiber. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 244.	2.1	43
146	Characterisation of Raman gain spectra in Yb:YAGâ€derived optical fibres. Electronics Letters, 2013, 49, 895-897.	1.0	33
147	Optimized statically nonâ€wetting hydrophobic electrospun surface of perfluorocyclobutyl aryl ether polymer. Polymer International, 2013, 62, 1152-1158.	3.1	9
148	Germanium microsphere high-Q resonator. Optics Letters, 2012, 37, 728.	3.3	45
149	Linkage of oxygen deficiency defects and rare earth concentrations in silica glass optical fiber probed by ultraviolet absorption and laser excitation spectroscopy. Optics Express, 2012, 20, 14494.	3.4	21
150	Reactive molten core fabrication of glass-clad amorphous and crystalline oxide optical fibers. Optical Materials Express, 2012, 2, 153.	3.0	25
151	Transverse Anderson localization in a disordered glass optical fiber. Optical Materials Express, 2012, 2, 1496.	3.0	80
152	On loss in silicon core optical fibers. Optical Materials Express, 2012, 2, 1511.	3.0	29
153	Spectral engineering of optical fiber preforms through active nanoparticle doping. Optical Materials Express, 2012, 2, 1520.	3.0	19
154	Mass density and the Brillouin spectroscopy of aluminosilicate optical fibers. Optical Materials Express, 2012, 2, 1641.	3.0	31
155	Non-thermal oxygen-rich helium plasmas using theta shaped tubing for evaluation of plasmid DNA strand breaks. , 2012, , .		1
156	Reactive oxygen species controllable non-thermal helium plasmas for evaluation of plasmid DNA strand breaks. Applied Physics Letters, 2012, 101, .	3.3	25
157	Longitudinally-graded optical fibers. , 2012, , .		0
158	Enhanced piezoelectric performance from carbon fluoropolymer nanocomposites. Journal of Applied Physics, 2012, 112, .	2.5	40
159	Spectral engineering of LaF3:Ce3+ nanoparticles: The role of Ce3+ in surface sites. Journal of Applied Physics, 2012, 111, .	2.5	17
160	Sapphire-derived all-glass optical fibres. Nature Photonics, 2012, 6, 627-633.	31.4	160
161	The influence of core geometry on the crystallography of silicon optical fiber. Journal of Crystal Growth, 2012, 352, 53-58.	1.5	29
162	Intense plasma emission induced by jet-to-jet coupling in atmospheric pressure plasma arrays. Applied Physics Letters, 2012, 101, .	3.3	30

#	Article	IF	Citations
163	On crystallographic orientation in crystal core optical fibers II: Effects of tapering. Optical Materials, 2012, 35, 93-96.	3.6	24
164	Intense and Energetic Atmospheric Pressure Plasma Jet Arrays. Plasma Processes and Polymers, 2012, 9, 253-260.	3.0	81
165	Feasibility study of Yb:YAG-derived silicate fibers with large Yb content as gain media. Optical Materials, 2012, 34, 1294-1298.	3.6	39
166	Cladding Glass Development for Semiconductor Core Optical Fibers. International Journal of Applied Glass Science, 2012, 3, 144-153.	2.0	33
167	Apoptosis Experiments of Cultured Tumor Cells Treated With 200- $muhbox{m}$-Sized Flexible Microplasma Jet. IEEE Transactions on Plasma Science, 2011, 39, 2974-2975.	1.3	6
168	Novel Visible Light Emitting Optical Fibers Using Up-Conversion. Journal of Display Technology, 2011, 7, 295-300.	1.2	1
169	All-optical modulation using two-photon absorption in silicon core optical fibers. Optics Express, 2011, 19, 19078.	3.4	51
170	Silica-clad crystalline germanium core optical fibers. Optics Letters, 2011, 36, 687.	3.3	50
171	Reactive molten core fabrication of silicon optical fiber. Optical Materials Express, 2011, 1, 1141.	3.0	48
172	Multiphonon-based comparison of erbium-doped yttria in large, fine grain polycrystalline ceramics and precursor forms. Optical Materials, 2011, 34, 95-98.	3.6	1
173	Apoptosis of lung carcinoma cells induced by a flexible optical fiber-based cold microplasma. Biosensors and Bioelectronics, 2011, 28, 333-338.	10.1	133
174	Atmospheric-Pressure Microplasma Jets From Linear Arrays of Hollow-Core Optical Fibers for Biomedical Applications. IEEE Transactions on Plasma Science, 2011, 39, 2958-2959.	1.3	6
175	Fabrication and characterization of GaP/polymer nanocomposites for advanced light emissive device structures. Journal of Nanoparticle Research, 2011, 13, 5565-5570.	1.9	8
176	Cancer Therapy: Singleâ€Cellâ€Level Microplasma Cancer Therapy (Small 16/2011). Small, 2011, 7, 2290-2290.	10.0	1
177	Scintillation of rare earth doped fluoride nanoparticles. Applied Physics Letters, 2011, 99, .	3.3	15
178	Annealing of silicon optical fibers. Journal of Applied Physics, 2011, 110, .	2.5	41
179	The Influence of Synthesis Parameters on Particle Size and Photoluminescence Characteristics of Ligand Capped Tb3+:LaF3. Polymers, 2011, 3, 2039-2052.	4.5	12
180	Advances in semiconductor core optical fiber. , 2011, , .		0

#	Article	IF	Citations
181	Semiconductor Core Optical Fibers. IEEE Photonics Journal, 2011, 3, 259-262.	2.0	3
182	Evolution of Optical and Mechanical Properties of Semiconductors over 40ÂYears. Journal of Electronic Materials, 2010, 39, 635-641.	2.2	9
183	On crystallographic orientation in crystal core optical fibers. Optical Materials, 2010, 32, 862-867.	3.6	31
184	Singleâ€Cellâ€Level Cancer Therapy Using a Hollow Optical Fiberâ€Based Microplasma. Small, 2010, 6, 1474-1478.	10.0	46
185	Synthesis, Processing, and Properties of Submicrometerâ€Grained Highly Transparent Yttria Ceramics. Journal of the American Ceramic Society, 2010, 93, 1320-1325.	3.8	74
186	Submicrometer Grainâ€Sized Transparent Erbiumâ€Doped Scandia Ceramics. Journal of the American Ceramic Society, 2010, 93, 3657-3662.	3.8	54
187	Advancements in semiconductor core optical fiber. Optical Fiber Technology, 2010, 16, 399-408.	2.7	102
188	An analysis of coupling between a whispering gallery mode laser in an elliptical microring and the dominant mode in the coaxially oriented elliptical optical fiber. Journal of Applied Physics, 2010, 107, 023104.	2.5	2
189	Scintillation of nanoparticles: Case study of rare earth doped fluorides. , 2010, , .		0
190	Toward a photoconducting semiconductor RF optical fiber antenna array. Applied Optics, 2010, 49, 5163.	2.1	13
191	Binary III-V semiconductor core optical fiber. Optics Express, 2010, 18, 4972.	3.4	86
192	Brillouin spectroscopy of YAG-derived optical fibers. Optics Express, 2010, 18, 10055.	3.4	75
193	Nonlinear transmission properties of hydrogenated amorphous silicon core optical fibers. Optics Express, 2010, 18, 16826.	3.4	65
194	Hydrothermal Growth and Thermal Property Characterization of ThO₂ Single Crystals. Crystal Growth and Design, 2010, 10, 2146-2151.	3.0	59
195	Preparation and Characterization of Rare Earth Doped Fluoride Nanoparticles. Materials, 2010, 3, 2053-2068.	2.9	47
196	On the fabrication of all-glass optical fibers from crystals. Journal of Applied Physics, 2009, 105, .	2.5	86
197	Evolution of Luminescence from Doped Gallium Phosphide over 40ÂYears. Journal of Electronic Materials, 2009, 38, 640-646.	2.2	19
198	Time-dependent evolution of crystal lattice, defects and impurities in CdIn2S4and GaP. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 1112-1115.	0.8	10

#	Article	IF	Citations
199	Erâ€Doped Y₂O₃ Nanoparticles: A Comparison of Different Synthesis Methods. Journal of the American Ceramic Society, 2009, 92, 2247-2253.	3.8	41
200	Organicâ€“inorganic hybrid nanoparticles with enhanced rare-earth emissions. Optical Materials, 2009, 31, 1327-1330.	3.6	24
201	Designer emission spectra through tailored energy transfer in nanoparticle-doped silica preforms. Optics Letters, 2009, 34, 2339.	3.3	25
202	Glass-clad single-crystal germanium optical fiber. Optics Express, 2009, 17, 8029.	3.4	130
203	Modal Interferometer Based on ARROW Fiber for Strain and Temperature Measurement. IEEE Photonics Technology Letters, 2009, 21, 1636-1638.	2.5	6
204	Diode-pumped 200Âμm diameter core, gain-guided, index-antiguided single mode fiber laser. Applied Physics B: Lasers and Optics, 2008, 90, 369-372.	2.2	85
205	Luminescence of Long-Term Ordered Pure and Doped Gallium Phosphide. Journal of Electronic Materials, 2008, 37, 388-395.	2.2	7
206	Ultracompact AWG Using Air-Trench Bends With Perfluorocyclobutyl Polymer Waveguides. Journal of Lightwave Technology, 2008, 26, 3062-3070.	4.6	7
207	Silicon optical Fiber. Optics Express, 2008, 16, 18675.	3.4	255
208	Single mode lasing in a gain-guided index anti-guided diode end pumped fiber. , 2008, , .		2
209	Growth and Properties of Doped Scandia Crystals. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
210	Single mode lasing in a 200μm diameter core gain-guided index anti-guided diode end pumped fiber. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	1
211	Specialty High Performance Coatings for Optical Fiber Applications via Perfluorocyclobutyl (PFCB) Aryl Ether Polymers. Materials Research Society Symposia Proceedings, 2007, 1030, 1.	0.1	0
212	Optical Characterization of Infrared Emitting Rare-Earth-Doped Fluoride Nanocrystals and Their Transparent Nanocomposites. Chemistry of Materials, 2007, 19, 1523-1528.	6.7	148
213	Structural Determination of Lightâ€Emitting Inorganic Nanoparticles with Complex Core/Shell Architectures. Advanced Materials, 2007, 19, 3266-3270.	21.0	25
214	Property-tailorable PFCB-containing polymers for wavelength division devices. Journal of Lightwave Technology, 2006, 24, 3227-3234.	4.6	6
215	Spectroscopic properties as a function of fluorine content in Eu3+:PMMA. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1592-1596.	2.1	8
216	Synthesis and Characterization of Eu3+-Doped Sol?Gel Silica Containing Vanadium Oxide Nanotubes. Journal of the American Ceramic Society, 2006, 89, 3573-3576.	3.8	5

#	Article	IF	Citations
217	Confined propagation and near single-mode laser oscillation in a gain-guided, index antiguided optical fiber. Applied Physics Letters, 2006, 89, 251101.	3.3	69
218	Liquid Crystalline Perfluorocyclobutyl Aryl Ether Polymers Containing Oligophenylene Mesogens. Macromolecules, 2006, 39, 4646-4649.	4.8	23
219	Infrared fluorescence and optical gain characteristics of chalcogenide-bound erbium cluster-fluoropolymer nanocomposites. Applied Physics Letters, 2006, 88, 091902.	3.3	20
220	Materials for freezing light. Waves in Random and Complex Media, 2005, 15, 113-118.	2.7	15
221	Frozen light in periodic stacks of anisotropic layers. Physical Review E, 2005, 71, 036612.	2.1	31
222	Synthesis and comparison of CF3 versus CH3 substituted perfluorocyclobutyl (PFCB) networks for optical applications. Journal of Polymer Science Part A, 2004, 42, 5292-5300.	2.3	27
223	Solution synthesis and spectroscopic characterization of high Er3+ content LaF3 for broadband 1.5 Î¼m amplification. Journal of Applied Physics, 2004, 95, 40-47.	2.5	41
224	AC conduction mechanism of SrBi2Ta2O9 thin films below room temperature. Journal of Materials Science Letters, 2003, 22, 5-7.	0.5	2
225	Photonic Crystal Composites with Reversible High-Frequency Stop Band Shifts. Advanced Materials, 2003, 15, 685-689.	21.0	129
226	Optical properties of perfluorocyclobutyl polymers. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 1838.	2.1	55
227	Optical limiting in SrBi2Ta2O9 and PbZrxTi1â^'xO3 ferroelectric thin films. Applied Physics Letters, 2002, 80, 3394-3396.	3.3	51
228	Carbon Nanotube Doped Polyaniline. Advanced Materials, 2002, 14, 1480-1483.	21.0	641
229	Structure Determination in Colloidal Crystal Photonic Bandgap Structures. Journal of the American Ceramic Society, 2002, 85, 1366-1368.	3.8	5
230	Carbon Nanotube Doped Polyaniline. , 2002, 14, 1480.		2
231	Photonic Bandgap Composites. Advanced Materials, 2001, 13, 1898.	21.0	106
232	Direct generation of optical diffractive elements in perfluorocyclobutane (PFCB) polymers by soft lithography. IEEE Photonics Technology Letters, 2000, 12, 1650-1652.	2.5	13
233	Fabrication of fibers with high rare-earth concentrations for Faraday isolator applications. Applied Optics, 1995, 34, 6848.	2.1	158
234	Future of Optical Glass Education. Optical Materials Express, 0, , .	3.0	2