Angela B Seddon

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/376278/publications.pdf

Version: 2024-02-01

116 papers	3,087 citations	331670 21 h-index	161849 54 g-index
118 all docs	118 docs citations	118 times ranked	2377 citing authors

#	Article	IF	Citations
1	Vibrational Biospectroscopy: An Alternative Approach to Endometrial Cancer Diagnosis and Screening. International Journal of Molecular Sciences, 2022, 23, 4859.	4.1	7
2	Evaluating the cytotoxicity of Geâ€“Sbâ€“Se chalcogenide glass optical fibres on 3T3 mouse fibroblasts. RSC Advances, 2021, 11, 8682-8693.	3.6	5
3	Investigation of ZnSe stability and dissolution behavior in As-S-Se chalcogenide glasses. Journal of Non-Crystalline Solids, 2021, 555, 120619.	3.1	12
4	Internal examination of mid-infrared chalcogenide glass optical fiber preforms and fiber using near-infrared imaging [Invited]. Optical Materials Express, 2021, 11, 1353.	3.0	3
5	Influence of Thermo-Mechanical Mismatch when Nanoimprinting Anti-Reflective Structures onto Small-core Mid-IR Chalcogenide Fibers. , 2021, , .		0
6	Mid-infrared spectral classification of endometrial cancer compared to benign controls in serum or plasma samples. Analyst, The, 2021, 146, 5631-5642.	3.5	11
7	Multicomponent Glass Optical Fibers for Mid-Infrared Invited Presentation. , 2021, , .		0
8	Gain-switched Dy³⁺:ZBLAN fiber laser operating around 3 Î¼m. JPhys Photonics, 2020, 2, 014003.	4.6	15
9	Bright Mid-Infrared (MIR) Photoluminescence Sources and their Application in Imaging and Sensing. , 2020, , .		1
10	Experimental Investigation of Actively Q-Switched Er3+:ZBLAN Fiber Laser Operating at around 2.8 Âµm. Sensors, 2020, 20, 4642.	3.8	12
11	Milliwatt-Level Spontaneous Emission Across the 3.5â€“8 Âµm Spectral Region from Pr3+ Doped Selenide Chalcogenide Fiber Pumped with a Laser Diode. Applied Sciences (Switzerland), 2020, 10, 539.	2.5	20
12	Experimental photoluminescence and lifetimes at wavelengths including beyond 7 microns in Sm³⁺-doped selenide-chalcogenide glass fibers. Optics Express, 2020, 28, 12373.	3.4	12
13	Pulsed fluoride glass fiber laser with near 3 Âµm operating wavelength. , 2020, , .		1
14	Low galliumâ€content, dysprosium <scp>III</scp>â€doped, Geâ€“Asâ€“Gaâ€“Se chalcogenide glasses for active midâ€infrared fiber optics. Journal of the American Ceramic Society, 2019, 102, 195-206.	3.8	9
15	Mid-Infrared (MIR) Glasses and Fibres for Medical Applications. , 2019, , .		1
16	Experimental observation of gain in a resonantly pumped Pr3+-doped chalcogenide glass mid-infrared fibre amplifier notwithstanding the signal excited-state absorption. Scientific Reports, 2019, 9, 11426.	3.3	16
17	Progress in biomedical mid-infrared hyperspectral imaging with fiber-based supercontinuum laser light. , 2019, , .		0
18	Spatiotemporal modeling of mid-infrared photoluminescence from terbium(III) ion doped chalcogenide-selenide multimode fibers. Journal of Rare Earths, 2019, 37, 1157-1163.	4.8	11

#	Article	IF	Citations
19	Experimental and numerical investigation to rationalize both near-infrared and mid-infrared spontaneous emission inÂPr3+ doped selenide-chalcogenide fiber. Journal of Luminescence, 2019, 209, 14-20.	3.1	9
20	Mid-Infrared Molecular Sensing. Springer Handbooks, 2019, , 1585-1632.	0.6	3
21	Determining the continuous thermo-optic coefficients of chalcogenide glass thin films in the MIR region using FTIR transmission spectra. Optics Express, 2019, 27, 22275.	3.4	5
22	Ultra-broadband mid-infrared emission from a Pr³⁺/Dy³⁺ co-doped selenide-chalcogenide glass fiber spectrally shaped by varying the pumping arrangement [Invited]. Optical Materials Express, 2019, 9, 2291.	3.0	18
23	Breaking Through the Wavelength Barrier: State-of-play on Rare-earth Ion Mid-infrared Fiber Lasers at 4-9 Âµm. , 2019, , .		0
24	Numerical analysis of spontaneous mid-infrared light emission from terbium ion doped multimode chalcogenide fibers. Journal of Luminescence, 2018, 199, 112-115.	3.1	5
25	Measurement of non-linear optical coefficients of chalcogenide glasses near the fundamental absorption band edge. Journal of Non-Crystalline Solids, 2018, 480, 13-17.	3.1	22
26	Compositional dependence of crystallization in Geâ€“Sbâ€“Se glasses relevant to optical fiber making. Journal of the American Ceramic Society, 2018, 101, 208-219.	3.8	21
27	Prospective on using fibre mid-infrared supercontinuum laser sources for <i>in vivo</i> spectral discrimination of disease. Analyst, The, 2018, 143, 5874-5887.	3.5	32
28	Comparative Modeling of Infrared Fiber Lasers. Photonics, 2018, 5, 48.	2.0	11
29	Quasi-hemispherical voids micropatterned PDMS as strain sensor. Optical Materials, 2018, 86, 408-413.	3.6	8
30	Experimental Investigation of Mid-Infrared Laser Action From Dy³⁺ Doped Fluorozirconate Fiber. IEEE Photonics Technology Letters, 2018, 30, 1083-1086.	2.5	26
31	Comparative study of praseodymium additives in active selenide chalcogenide optical fibers. Optical Materials Express, 2018, 8, 3910.	3.0	10
32	Comparative study of infrared fiber laser models. , 2018, , .		0
33	Promising emission behavior in Pr 3+ /In selenide-chalcogenide-glass small-core step index fiber (SIF). Optical Materials, 2017, 67, 98-107.	3.6	21
34	A study of MIR photoluminescence from Pr3+ doped chalcogenide fibers pumped at near-infrared wavelengths. , 2017, , .		1
35	Mid-Infrared Photonics in Healthcare. , 2016, , .		0
36	Time-resolved terahertz spectroscopy of charge carrier dynamics in the chalcogenide glass As_30Se_30Te_40 [Invited]. Photonics Research, 2016, 4, A22.	7.0	8

#	Article	IF	Citations
37	Dy³⁺â€Doped Selenide Chalcogenide Glasses: Influence of Dy³⁺ Dopantâ€Additive and Containment. Journal of the American Ceramic Society, 2016, 99, 2283-2291.	3.8	10
38	Broadband terahertz spectroscopy of chalcogenide glass As<inf>30</inf>Se<inf>30</inf>Te<inf>40</inf>. , 2016, , .		0
39	Predictive, Miniature Coâ€Extrusion of Multilayered Glass Fiberâ€Optic Preforms. Journal of the American Ceramic Society, 2016, 99, 106-114.	3.8	5
40	Mid-infrared (MIR) photonics: MIR passive and active fiberoptics chemical and biomedical, sensing and imaging. Proceedings of SPIE, 2016, , .	0.8	4
41	Toward Mid-Infrared, Subdiffraction, Spectral-Mapping of Human Cells and Tissue: SNIM (Scanning) Tj ETQq1 1 0.784314 rgBT /Overl	4.6	8
42	Towards the mid-infrared optical biopsy. Proceedings of SPIE, 2016, , .	0.8	6
43	M-type fiber for exploiting higher-order-modes dispersion for application in mid-IR supercontinuum generation. , 2016, , .		3
44	Correlating structure with non-linear optical properties in xAs₄₀Se₆₀Â·(1 â^’) Tj ETQq0 0 0 rgBT /Overlock 10	2.8	16
45	Low-temperature photoluminescence in chalcogenide glasses doped with rare-earth ions. Journal of Alloys and Compounds, 2015, 648, 237-243.	5.5	12
46	Photoluminescence of some chalcogenide glasses doped with rare-earth ions. , 2015, , .		0
47	Mid-infrared photoluminescence in small-core fiber of praseodymium-ion doped selenide-based chalcogenide glass. Optical Materials Express, 2015, 5, 870.	3.0	58
48	Mid-infrared fiberoptic devices and systems for in vivo medical diagnostics and surgery. , 2015, , .		1
49	Mid-Infrared Supercontinuum Generation Spanning More Than 11 Î¼m in a Chalcogenide Step-Index Fiber. , 2015, , .		0
50	Low loss Ge-As-Se chalcogenide glass fiber, fabricated using extruded preform, for mid-infrared photonics. Optical Materials Express, 2015, 5, 1722.	3.0	79
51	Fabrication of stable, low optical loss rib-waveguides via embossing of sputtered chalcogenide glass-film on glass-chip. Optical and Quantum Electronics, 2015, 47, 351-361.	3.3	12
52	Mid-infrared supercontinuum generation to 125Î¼m in large NA chalcogenide step-index fibres pumped at 45Î¼m. Optics Express, 2014, 22, 19169.	3.4	83
53	Refractive index dispersion of chalcogenide glasses for ultra-high numerical-aperture fiber for mid-infrared supercontinuum generation. Optical Materials Express, 2014, 4, 1444.	3.0	78
54	Mid-infrared integrated optics: versatile hot embossing of mid-infrared glasses for on-chip planar waveguides for molecular sensing. Optical Engineering, 2014, 53, 071824.	1.0	18

#	Article	IF	Citations
55	Numerical investigation of mid-infrared emission from Pr $$^{3+}$$ 3 + doped GeAsGaSe fibre. Optical and Quantum Electronics, 2014, 46, 593-602.	3.3	4
56	Nonlinear optical response and heating of chalcogenide glasses upon irradiation by the ultrashort laser pulses. Optical Engineering, 2014, 53, 071812.	1.0	20
57	The local environment of Dy3+in selenium-rich chalcogenide glasses. RSC Advances, 2014, 4, 42364-42371.	3.6	8
58	Thulium pumped mid-infrared 09â€“9Î¼m supercontinuum generation in concatenated fluoride and chalcogenide glass fibers. Optics Express, 2014, 22, 3959.	3.4	126
59	Optical characterisation of Er 3+ -doped oxyfluoride glasses and nano-glass-ceramics. Materials Letters, 2014, 136, 233-236.	2.6	17
60	Mid-infrared supercontinuum covering the 1.4â€“13.3â€…Î¼m molecular fingerprint region using ultra-high NA chalcogenide step-index fibre. Nature Photonics, 2014, 8, 830-834.	31.4	811
61	First Identification of Rareâ€Earth Oxide Nucleation in Chalcogenide Glasses and Implications for Fabrication of Midâ€Infrared Active Fibers. Journal of the American Ceramic Society, 2014, 97, 432-441.	3.8	13
62	Large core, multimode, chalcogenide glass fibre coupler by side-polishing. Optical and Quantum Electronics, 2013, 45, 961-967.	3.3	4
63	Potential for using mid-infrared light for non-invasive, early-detection of skin cancers in vivo. , 2013, , .		4
64	Coâ€Extrusion of Multilayer Glass Fiberâ€Optic Preforms: Prediction of Layer Dimensions in the Extrudate. Journal of the American Ceramic Society, 2013, 96, 118-124.	3.8	16
65	Third-order non-linear optical response in chalcogenide glasses: Measurement and evaluation. , 2013, , .		0
66	Midâ€infrared (IR) â€“ A hot topic: The potential for using midâ€IR light for nonâ€invasive early detection of skin cancer <i>in vivo</i>. Physica Status Solidi (B): Basic Research, 2013, 250, 1020-1027.	1.5	119
67	Numerical demonstration of 3â€“12Âµm supercontinuum generation in large-core step-index chalcogenide fibers pumped at 4.5Âµm. , 2013, , .		2
68	Dispersion of linear and nonlinear refractive index in chalcogenide glass. , 2012, , .		4
69	The Influence of Dysprosium Addition on the Crystallization Behavior of a Chalcogenide Selenide Glass Close to the Fiber Drawing Temperature. Journal of the American Ceramic Society, 2012, 95, 3834-3841.	3.8	21
70	Chalcogenide glass fibreoptics for new mid-infrared medical endoscopy. , 2012, , .		2
71	The effect of the nature of the rare earth additive on chalcogenide glass stability. Proceedings of SPIE, 2011, , .	0.8	5
72	Chalcogenide waveguides as a base for engineering broadband light sources in the mid-infrared. , 2011, , .		0

#	Article	IF	Citations
73	Crystallization behavior of Dy3+-doped selenide glasses. Journal of Non-Crystalline Solids, 2011, 357, 2453-2462.	3.1	39
74	A Prospective for New Midâ€Infrared Medical Endoscopy Using Chalcogenide Glasses. International Journal of Applied Glass Science, 2011, 2, 177-191.	2.0	129
75	Study of nonlinear optical properties of Er³⁺ - and Yb³⁺ -doped oxyfluoride glasses. , 2010, , .		0
76	Progress in rare-earth-doped mid-infrared fiber lasers. Optics Express, 2010, 18, 26704.	3.4	269
77	Processing of chalcogenide glass by the femtosecond laser pulses for achieving highly non-linear photonic structures. , 2009, , .		0
78	Embossing of chalcogenide glasses: monomode rib optical waveguides in evaporated thin films. Optics Letters, 2009, 34, 1234.	3.3	55
79	Femtosecond Laser Processing as an Advantageous 3-D Technology for the Fabrication of Highly Nonlinear Chip-Scale Photonic Devices. Journal of Lightwave Technology, 2009, 27, 3275-3282.	4.6	9
80	Solid Microstructured Chalcogenide Glass Optical Fibers for the Near- and Mid-Infrared Spectral Regions. IEEE Photonics Technology Letters, 2009, 21, 1804-1806.	2.5	30
81	Experimental studies of non-linear properties of chalcogenide glasses. , 2009, , .		5
82	Extrusion of chalcogenide glass preforms and drawing to multimode optical fibers. Journal of Non-Crystalline Solids, 2008, 354, 3418-3427.	3.1	57
83	Femtosecond laser writing of buried waveguides in erbium^{III}-doped oxyfluoride glasses and nano-glass-ceramics. , 2008, , .		1
84	Modification of chalcogenide glasses by femtosecond laser pulses for the fabrication of highly non-linear 3D photonic devices. , 2008, , .		0
85	Non-linear chalcogenide glasses and technologies for the development of ultra-fast chip-scale optical devices. , 2008, , .		1
86	Rare-earth doped transparent nano-glass-ceramics: a new generation of photonic integrated devices. Proceedings of SPIE, 2007, , .	0.8	0
87	Temperature dependence of viscosity of Er3+-doped oxyfluoride glasses and nano-glass-ceramics. Journal of Materials Science: Materials in Electronics, 2007, 18, 145-151.	2.2	11
88	Large core, single-mode glass-based waveguides for photonic integrated circuits. , 2006, , .		1
89	Photonic integrated circuits based on novel glass waveguides and devices. , 2006, , .		0
90	Chalcogenide glass films for the bonding of GaAs optical parametric oscillator elements. , 2004, , .		9

#	Article	IF	Citations
91	On a qualitative model for the incorporation of fluoride nano-crystals within an oxide glass network in oxy-fluoride glass-ceramics. Journal of Non-Crystalline Solids, 2004, 337, 191-195.	3.1	18
92	Fluorotellurite glasses with improved mid-infrared transmission. Journal of Non-Crystalline Solids, 2003, 331, 48-57.	3.1	112
93	Ion-exchanged planar waveguides in different Er3+-doped tellurite glasses. , 2003, , .		6
94	Er3+-doped ultratransparent oxyfluoride glass-ceramics for application in the 1.54 micron telecommunication window. , 2003, , .		0
95	Spectroscopic studies of bulk AS 2 S 3 glasses and amorphous films doped with Dy, Sm and Mn. , 2002, , .		6
96	Title is missing!. Journal of Materials Science Letters, 2002, 21, 293-295.	0.5	36
97	Nucleation and crystallisation of transparent, erbium III-doped, oxyfluoride glass-ceramics. Journal of Non-Crystalline Solids, 2001, 290, 25-31.	3.1	47
98	Optical properties of As 2 S 3 and As 2 Se 3 glasses doped with Dy, Sm, and Mn. , 2001, , .		1
99	<title>Structural changes during thermally induced polymerization of ormosil films from trimethoxysilylpropylmethacrylate and zirconium-n-propoxide modified with methacrylic acid</title>. , 2000, , .		1
100	Title is missing!. Journal of Sol-Gel Science and Technology, 2000, 19, 687-690.	2.4	24
101	Crystallization in 70Ga₂S₃[.]30La₂S₃(mol%) Glasses as a Function of Oxide/Hydroxide Concentration. Journal of the American Ceramic Society, 2000, 83, 617-622.	3.8	2
102	The decisive role of oxide content in the formation and crystallization of gallium-lanthanum-sulfide glasses. Journal of Materials Research, 1999, 14, 2621-2627.	2.6	9
103	Galliumâ€"lanthanumâ€"sulphide glasses: a review of recent crystallisation studies. Journal of Non-Crystalline Solids, 1999, 256-257, 17-24.	3.1	11
104	<title>Gallium-lanthanum-sulphide glasses: extrusion of fiber optic preforms and relevant physical properties</title>. , 1999, 3849, 160.		5
105	CdSe Quantum Dot Doped Amine-Functionalized Ormosils. Journal of Sol-Gel Science and Technology, 1998, 13, 623-628.	2.4	8
106	Effects of Oxide Content on the Glassâ€Forming Ability of the Ga₂S₃â€Na₂S System. Journal of the American Ceramic Society, 1998, 81, 3353-3356.	3.8	11
107	Extrusion method for making fiber optic preforms of special glasses. , 1998, , .		10
108	Potential of organic-inorganic hybrid materials derived by sol-gel for photonic applications. Proceedings of SPIE, 1997, 10290, 143.	0.8	7

#	Article	IF	Citations
109	Near- and mid-infrared spectroscopy of solâ€“gel derived ormosils: vinyl and phenyl silicates. Journal of Non-Crystalline Solids, 1997, 210, 187-203.	3.1	204
110	<title>Cadmium selenide quantum dot doping of organic-inorganic hybrid materials derived by sol-gel processing</title>. , 1997, , .		3
111	Strengthening of glass rods with ormosil polymeric coatings. Journal of Non-Crystalline Solids, 1995, 185, 1-17.	3.1	24
112	Cleavage of silicon-carbon bonds and relative rates of hydrolysis of ormosil precursors for optical materials. Advanced Materials for Optics and Electronics, 1994, 4, 285-291.	0.4	2
113	Optical properties and structure of a new, low-loss, hybrid organic-inorganic host material for molecular dopants. , 1994, , .		4
114	Solubility and aggregation studies of copper(II) dodecanoate in organic solvents. Transition Metal Chemistry, 1985, 10, 212-214.	1.4	0
115	Thermal Analysis of Inorganic Compound Glasses and Glass-Ceramics. , 0, , 410-449.		7
116	Future of Optical Glass Education. Optical Materials Express, 0, , .	3.0	2