David Le Coq

List of Publications by Year
in descending order

46 papers	1,056 citations	516710 16 h-index	414414 32 g-index
46 all docs	46 docs citations	46 times ranked	767 citing authors

#	Article	IF	Citations
1	Structure of Ga-Sb-Se glasses by combination of 77Se NMR and neutron diffraction experiments with molecular dynamics. Journal of Non-Crystalline Solids, 2021, 557, 120574.	3.1	3
2	Investigation on Chalcogenide Glass Additive Manufacturing for Shaping Mid-infrared Optical Components and Microstructured Optical Fibers. Crystals, 2021, 11, 228.	2.2	12
3	Mid-infrared hollow core fiber drawn from a 3D printed chalcogenide glass preform. Optical Materials Express, 2021, 11, 198.	3.0	37
4	Glassy GaS: transparent and unusually rigid thin films for visible to mid-IR memory applications. Physical Chemistry Chemical Physics, 2020, 22, 25560-25573.	2.8	15
5	Mechanochemical synthesis and structural characterization of gallium sulfide Ga2S3. Journal of Solid State Chemistry, 2020, 292, 121743.	2.9	9
6	Step-index fibre from metal halide chalcogenide glasses. Optical Materials Express, 2020, 10, 2800.	3.0	5
7	Bent HgI₂ Molecules in the Melt and Sulfide Glasses: Implications for Nonlinear Optics. Chemistry of Materials, 2019, 31, 4103-4112.	6.7	13
8	Percolation behavior of Ag in Ge16Sb12Se72 glassy matrix and its impact on corresponding ionic conductivity. Journal of Alloys and Compounds, 2019, 782, 375-383.	5.5	10
9	Short and medium range structures of 80GeSe₂â€“20Ga₂Se₃chalcogenide glasses. Journal of Physics Condensed Matter, 2018, 30, 185403.	1.8	5
10	Experimental and Theoretical Insights into the Structure of Tellurium Chloride Glasses. Inorganic Chemistry, 2018, 57, 2517-2528.	4.0	4
11	Ionic-to-Electronic Conductivity Crossover in CdTeâ€“AgIâ€“As₂Te₃ Glasses: An ^{110m}Ag Tracer Diffusion Study. Journal of Physical Chemistry B, 2018, 122, 4179-4186.	2.6	9
12	Ge-free chalcogenide glasses based on Ga-Sb-Se and their stabilization by iodine incorporation. Journal of Non-Crystalline Solids, 2018, 481, 543-547.	3.1	9
13	Ultrafast Laser Inscription of High-Performance Mid-Infrared Waveguides in Chalcogenide Glass. IEEE Photonics Technology Letters, 2018, 30, 2123-2126.	2.5	7
14	New Method for Direct Laser Writing of High Performances Near and Mid-infrared Waveguides. , 2018, , .		0
15	New strategy for direct laser writing of low loss waveguide. , 2017, , .		0
16	Telluride glasses with far-infrared transmission up to 35Î¼m. Optical Materials, 2017, 72, 809-812.	3.6	16
17	GeS₂â€“Ga₂S₃â€“LiCl Glass System: Electrical Conductivity and Structural Considerations. International Journal of Applied Glass Science, 2016, 7, 513-523.	2.0	13
18	Mercury Sulfide Dimorphism in Thioarsenate Glasses. Journal of Physical Chemistry B, 2016, 120, 5278-5290.	2.6	6

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19	Direct laser writing of a low-loss waveguide with independent control over the transverse dimension and the refractive index contrast between the core and the cladding. Optics Letters, 2016, 41, 3507.	3.3	16
20	[INVITED] Tailoring the morphology of photowritten buried waveguides by helical trajectory in As2S3 glass. Optics and Laser Technology, 2016, 78, 56-61.	4.6	3
21	Effects of Ag addition on properties and structure of Geâ€"Gaâ€"Seâ€"AgI chalcohalide glasses. Journal of Non-Crystalline Solids, 2016, 432, 232-236.	3.1	10
22	Influence of NaX (X=I or Cl) additions on GeS2â€"Ga2S3 based glasses. Journal of Solid State Chemistry, 2014, 220, 238-244.	2.9	16
23	Mercury thioarsenate glasses: a hybrid chain/pyramidal network. RSC Advances, 2014, 4, 49236-49246.	3.6	13
24	108mAg tracer diffusion in HgI2â€"Ag2Sâ€"As2S3 glass system. Solid State Ionics, 2014, 262, 821-823.	2.7	1
25	Ionic and electronic transport in AgIâ€"As2Te3 glasses. Solid State Ionics, 2013, 253, 181-184.	2.7	9
26	Study of the pseudo-ternary Ag2Sî—¸As2S3î—¸HgI2 vitreous system. Journal of Solid State Chemistry, 2013, 199, 264-270.	2.9	3
27	Direct laser writing of buried waveguide in As_2S_3 glass using a helical sample translation. Optics Letters, 2013, 38, 4212.	3.3	24
28	Spatially resolved Raman analysis of laser induced refractive index variation in chalcogenide glass. Optical Materials Express, 2012, 2, 1768.	3.0	39
29	New chalcogenide glasses in the CdTeâ€"AgIâ€"As2Te3 system. Materials Research Bulletin, 2012, 47, 193-198.	5.2	10
30	CsCl effect on the optical properties of the 80GeS2â€"20Ga2S3 base glass. Applied Physics A: Materials Science and Processing, 2012, 106, 697-702.	2.3	37
31	Sensitive and selective detection of OH radicals using Faraday rotation spectroscopy at 28 Âµm. Optics Express, 2011, 19, 2493.	3.4	38
32	Free carrier accumulation during direct laser writing in chalcogenide glass by light filamentation. Optics Express, 2011, 19, 20088.	3.4	17
33	Synthesis and properties of new CdSeâ€"AgIâ€"As2Se3 chalcogenide glasses. Materials Research Bulletin, 2011, 46, 210-215.	5.2	9
34	Refractive index variations induced by femtosecond laser direct writing in the bulk of As2S3 glass at high repetition rate. Optical Materials, 2011, 33, 872-876.	3.6	14
35	Chemical and structural origin of conductivity changes in CdSeâ€"AgIâ€"As2Se3 glasses. Solid State Ionics, 2010, 181, 466-472.	2.7	22
36	110mAg tracer diffusion studies of CdSeâ€"AgIâ€"As2Se3 glasses. Solid State Ionics, 2010, 181, 1467-1472.	2.7	8

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37	Morphology of waveguide written by femtosecond laser in glass. Journal of Non-Crystalline Solids, 2009, 355, 1832-1835.	3.1	11
38	Neutron and X-ray diffraction studies of TeCl4 and TeBr4 liquids. Journal of Non-Crystalline Solids, 2008, 354, 259-262.	3.1	11
39	Biologically Inspired Sensing: Infrared Spectroscopic Analysis of Cell Responses to an Inhalation Health Hazard. Biotechnology Progress, 2006, 22, 24-31.	2.6	17
40	Infrared biosensors using hydrophobic chalcogenide fibers sensitized with live cells. Sensors and Actuators B: Chemical, 2006, 119, 355-362.	7.8	90
41	Lung cell fiber evanescent wave spectroscopic biosensing of inhalation health hazards. Biotechnology and Bioengineering, 2006, 95, 599-612.	3.3	32
42	Evaluation of Toxic Agent Effects on Lung Cells by Fiber Evanescent Wave Spectroscopy. Applied Spectroscopy, 2005, 59, 1-9.	2.2	72
43	Recent advances in chalcogenide glasses. Journal of Non-Crystalline Solids, 2004, 345-346, 276-283.	3.1	254
44	A new approach of preform fabrication for chalcogenide fibers. Journal of Non-Crystalline Solids, 2003, 326-327, 451-454.	3.1	14
45	Infrared glass fibers for in-situ sensing, chemical and biochemical reactions. Comptes Rendus Chimie, 2002, 5, 907-913.	0.5	64
46	Infrared chalcogen glasses: chemical polishing and fibre remote spectroscopy. Solid State Sciences, 2001, 3, 233-239.	0.7	29