SCHOTT
glass made of ideas

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Selected publications – Optical glass

No.	Year	Title	Authors	Published in
[55]	2024	New wide range spectral data on the stress optical coefficient of optical glass	R. Jedamzik, J. Weber, A. Engel, U. Petzold, H. Kaufmann	Proc. SPIE 12866
[54]	2023	Blue laser solarization of optical glass	R. Jedamzik, A. Carre, U. Petzold	Proc. SPIE 12402
[53]	2022	Optical glass and optical design: Otto Schott's role in the entangled development	U. Fotheringham, U. Petzold, S. Ritter, W. James	Opt. Mat. Express, Vol. 12, No. 8
[52]	2022	Solarization effects in optical glass from UV to blue	R. Jedamzik, V. Dietrich, U. Petzold, A. Engel	Proc. SPIE 12221
[51]	2022	Optical glass for high power digital projection	R. Jedamzik, A. Carre, V. Hagemann, L. Bartelmess, S. Leukel, U. Petzold	Proc. SPIE 11982
[50]	2021	Review of Optical Manufacturing 2000 to 2020: Chapter 2: Optical Materials	F. Nürnberg, B. Kühn, R. Jedamzik, U. Petzold, G. von der Goenna	Review of Optical Manufacturing 2000 to 2020, eds. A. Zhang, R. Youngworth, SPIE
[49]	2021	From history to future market requirements of optical glass at SCHOTT	R. Jedamzik, U. Petzold, F. Rupp	Proc. SPIE 11889
[48]	2021	The modern way of refractive index measurement of optical glass at SCHOTT	F. Rupp, R. Jedamzik, L. Bartelmess, U. Petzold	Proc. SPIE 11873

[47]	2021	Review of Optical Manufacturing 2000 to 2020	A. Zhang, R. N. Youngworth	SPIE. Press Book
[46]	2021	Optical materials for blue-laser processing	R. Jedamzik, A. Carre, V. Hagemann, L. Bartelmess, S. Leukel, U. Petzold	Proc. SPIE. 11818
[45]	2021	Optical glass: Challenges from optical design	U. Fotheringham, M. Letz, U. Petzold, S. Ritter, Y. Menke-Berg	Encyclopedia of materials
[44]	2020	Optical material for digital projection	R. Jedamzik, V. Hagemann, V. Dietrich, U. Petzold	Proc. SPIE 11262
[43]	2020	Optical material for space applications	R. Jedamzik, G. Weber, U. Petzold	Proc. SPIE 11451
[42]	2019	Optical glass: refractive index homogeneity from small to large parts – an overview	R. Jedamzik, U. Petzold	Proc. SPIE 10914
[41]	2018	Effects of the EU's REACH and RoHS regulations on optical and filter glass	P. Hartmann	SPIE Newsroom
[40]	2018	Mechanical strength of optical glasses	P. Hartmann	Proc. SPIE 10692
[39]	2018	Effects of striae inside optical glasses on optical systems	S. Reichel, P. Hartmann, U. Petzold, S. Gärtner, H. Gross	Proc. SPIE 10690
[38]	2018	Investigation of striae tolerance in optical system	Y. Zhang, Y-N. Chen. H. Gross, P. Hartmann, St. Reichel	Proc. SPIE 10690
[37]	2018	From VIS to SWIR: a challenge for optical glass and IR materials	R. Jedamzik, U. Petzold, G. Weber	Proc. SPIE 10528
[36]	2017	SCHOTT optical glass in space	R. Jedamzik, U. Petzold	Proc. SPIE 10401
[35]	2017	Introducing the quantum efficiency of fluorescence of SCHOTT optical glass	R. Jedamzik, F. Elsmann, A. Engel, U. Petzold, J. Pleitz	Proc. SPIE 10375
[34]	2017	Optical Glass: A High-Tech Base Material as Key Enabler for Photonics	U. Petzold	IntechOpen
[33]	2017	Preliminary results of a new proposal for objective human independent striae measurement	S. Reichel, U. Petzold, C. Lempa	Proc. SPIE 10329
[32]	2017	Latest results on solarization of optical glasses with pulsed laser radiation	R. Jedamzik, U. Petzold	Proc. SPIE 10097
[31]	2016	Large optical glass blanks for the ELT generation	R. Jedamzik, U. Petzold, V. Dietrich, V. Wittmer, and O. Rexius	Proc. SPIE 9912

[30]	2015	Instantaneous Dispersion: A Window into Property Relationships for Optical Glass	N. A. Carlie	Int. J. Appl. Glass Sci., Vol. 6, No. 4
[29]	2015	Optical glass: standards – present state and outlook	P. Hartmann	Adv. Opt. Techn., Vol. 4, No. 5-6
[28]	2015	Optical glass: deviation of relative partial dispersion from the normal line—need for a common definition	P. Hartmann	Opt. Eng., Vol. 54, No. 10
[27]	2015	The ESA radglass activity: A radiation study of non rad-hard glasses	I. Manolis, J.L. Bezy, A. Costantino, R. Vink, A. Deep, M. Ahmad, E. Amorim, M. D. Miranda, and R. Meynart	Proc. SPIE 9639
[26]	2015	V-Block refractometer for monitoring the production of optical glasses	U. Petzold, R. Jedamzik, P. Hartmann, and S. Reichel	Proc. SPIE 9628
[25]	2015	Results of a polishing study for SCHOTT XLD glasses	Jedamzik, H. Yadwad, and V. Dietrich	Proc. SPIE 9628
[24]	2015	Efficient simulation of autofluorescence effects in microscopic lenses	H. Gross, O. Rodenko, M. Esslinger, and A. Tünnermann	Proc. SPIE 9626
[23]	2015	Optical lead flint glasses – key material in optics since centuries and in future	P. Hartmann	Proc. SPIE 9626
[22]	2014	Optical Glass	P. Hartmann	SPIE Press (Book)
[21]	2014	EU regulations threaten availability of raw materials for optics	P. Hartmann	SPIE Professional
[20]	2014	Optical glass - refractive index change with wavelength and temperature	M. Englert, P. Hartmann and S. Reichel	Proc. SPIE 9131
[19]	2014	Optical Glass with tightest refractive index and dispersion tolerances for high-end optical designs	R. Jedamzik, S. Reichel and P. Hartmann	Proc. SPIE 8982
[18]	2013	Recent Results on Bulk Laser Damage Threshold of Optical Glasses	R. Jedamzik and F. Elsmann	Proc. SPIE 8603
[17]	2013	Cladding YAG crystal fibers with high-index glasses for reducing the number of guided modes	K.-Y. Hsu, M.-H. Yang, D.-Y. Jheng, C.-C. Lai, S.-L. Huang, K. Mennemann, and V. Dietrich	Opt. Mat. Express, Vol. 3, No. 6
[16]	2012	110 years BK7 – Optical glass type with long tradition and ongoing progress	P. Hartmann	Proc. SPIE 8550
[15]	2012	Optical glass: past and future of a key enabling material	P. Hartmann	Adv. Opt. Techn. 1

[14]	2011	Optical glass and the EU directive RoHS	P. Hartmann and U. Hamm	Proc. SPIE 8065
[13]	2011	Optical Glass – Dispersion in the Near Infrared	P. Hartmann	Proc. SPIE 8167
[12]	2011	LED collimation using high index glass	R. Biertümpfel and S. Reichel	Proc. SPIE 8170
[11]	2010	Optical glass and glass ceramic historical aspects and recent developments: a Schott view	P. Hartmann, R. Jedamzik, S. Reichel and B. Schreder	Appl. Opt., Vol. 49, No. 16
[10]	2009	Measurement and simulation of striae in optical glass	H. Gross, M. Hofmann, R. Jedamzik, P. Hartmann, and S. Sinzinger	Proc. SPIE 7389
[9]	2008	Optical glasses and optical elements: comparison of specification standards ISO DIS 12123 and ISO 10110	P. Hartmann, R. Jedamzik	Proc. SPIE 7102
[8]	2008	Optical materials for astronomy from SCHOTT: the quality of large components	R. Jedamzik, J. Hengst, F. Elsmann, C. Lemke, T. Döhring, and P. Hartmann	Proc. SPIE 7018
[7]	2008	Refractive Index Drop Observed After Precision Molding of Optical Elements: A Quantitative Understanding Based on the Tool– Narayanaswamy–Moynihan Model	U. Fotheringham, A. Baltes, P. Fischer, P. Hoehn, R. Jedamzik, C. Schenk, C. Stolz, and G. Westenberger	J. Am. Ceram. Soc., Vol. 91, No. 3
[6]	2006	Challenges in optics for Extremely Large Telescope Instrumentation	P. Spano, F.M. Zerbi, C.J. Norrie, C.R. Cunningham, K.G. Strassmeier, A. Bianco, P.A. Blanche, M. Bougoin, M. Ghigo, P. Hartmann, L. Zago, E. Atad-Ettedgui, B. Delabre, H. Dekker, M. Melozzi, B. Snyders, R. Takke, and D.D. Walker	Astron. Nachr. / AN 999, No. 88
[5]	2006	Large optical glass lenses for ELTs	P. Hartmann and R. Jedamzik	Proc. SPIE 6273
[4]	2005	Tailored properties of optical glasses	R. Jedamzik, B. Hladik, and P. Hartmann	Proc. SPIE 5965
[3]	2004	Removing the mystique of glass selection	R. E. Fischer, A. J. Grant, U. Fotheringham, P. Hartmann, and S. Reichel	Proc. SPIE 5524
[2]	2004	Large optical glass blanks for astronomy	R. Jedamzik and P. Hartmann	Proc. SPIE 5494
[1]	2003	Optical glasses and glass ceramics for large optical systems	T. Doehring, P. Hartmann, H. F. Morian, and R. Jedamzik	Proc. SPIE 4842