



## Simple turbulence measurements with azopolymer thin films

Submitted by Emmanuel Lemoine on Mon, 06/02/2014 - 18:29

Titre	Simple turbulence measurements with azopolymer thin films
Type de publication	Article de revue
Auteur	Barille, Régis [1], Pérez, Dario G. [2], Morille, Yohann [3], Zielinska, Sonia [4], Ortyl, Ewelina [5]
Editeur	Optical Society of America
Type	Article scientifique dans une revue à comité de lecture
Année	2013
Langue	Anglais
Date	04/2013
Numéro	7
Pagination	1128-1130
Volume	38
Titre de la revue	Optics Letters
ISSN	0146-9592
Mots-clés	angle-of-arrival [6], atmospheric-turbulence [7], beam [8], intensity [9], parameter [10], path [11]
Résumé en anglais	<p>A simple method to measure the influence on the laser beam propagation by a turbid medium is proposed. This measurement is based on the inscription of a surface relief grating (SRG) on an azopolymer thin film. The grating obtained with a single laser beam after propagation into a turbulent medium is perturbed and directly analyzed by a CCD camera through its diffraction pattern. Later, by scanning the surface pattern with an atomic force microscope, the inscribed SRG is analyzed with the Radon transform. This method has the advantage of using a single beam to remotely inscribe a grating detecting perturbations during the beam path. A method to evaluate the refractive index constant structure is developed.</p>
URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua3185">http://okina.univ-angers.fr/publications/ua3185</a> [12]

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