



Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali (/jspui/)
/ Publications of IISER Mohali (/jspui/handle/123456789/4)
/ Research Articles (/jspui/handle/123456789/9)

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/2903>

Title:	Unveiling spatial correlations in biophotonic architecture of transparent insect wings
Authors:	Kumar, Pramod (/jspui/browse?type=author&value=Kumar%2C+Pramod) Mandal, S. (/jspui/browse?type=author&value=Mandal%2C+S.) Shamoon, Danish (/jspui/browse?type=author&value=Shamoon%2C+Danish) Singh, Dharendra P. (/jspui/browse?type=author&value=Singh%2C+Dhirendra+P.) Singh, K.P. (/jspui/browse?type=author&value=Singh%2C+K.P.)
Keywords:	Natural Photonic Structures Optical Diffraction and Interference Fourier Optics Nanophotonics and Photonics Crystal
Issue Date:	2013
Publisher:	Science and Technology Publications, Lda
Citation:	PHOTOPTICS 2013 - Proceedings of the International Conference on Photonics, Optics and Laser Technology, pp. 106-110.
Abstract:	We probe the natural complex structures in the transparent insect wings by a simple, non-invasive, real time optical technique using both monochromatic and broadband femtosecond lasers. A stable, reproducible and novel diffraction pattern is observed unveiling long range spatial correlations and structural-symmetry at various length scales for a large variety of wings. While matching the sensitivity of SEM for such microstructures, it is highly efficient for extracting long range structural organization with potentially broad applicability.
Description:	Only IISERM authors are available in the record.
URI:	https://www.scitepress.org/Link.aspx?doi=10.5220/0004339001060110 (https://www.scitepress.org/Link.aspx?doi=10.5220/0004339001060110) http://hdl.handle.net/123456789/2903 (http://hdl.handle.net/123456789/2903)
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format	
Need to add pdf.odt (/jspui/bitstream/123456789/2903/1/Need%20to%20add%20pdf.odt)		8.63 kB	OpenDocument Text	View/Open (/jspui/bitstream/123456789/2903/1/Need%20to%20add%20pdf.odt)

[Show full item record \(/jspui/handle/123456789/2903?mode=full\)](#)

[Statistics \(/jspui/handle/123456789/2903/statistics\)](#)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.

