

Experimental method for reliably establishing the refractive index of a biological exocuticle

Optics Express

15, 4351

DOI: [10.1364/oe.15.004351](https://doi.org/10.1364/oe.15.004351)

Citation Report

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 2 | Light manipulation in a marine diatom. <i>Journal of Materials Research</i> , 2008, 23, 3229-3235. | 1.2 | 69 |
| 3 | Coloration using higher order optical interference in the wing pattern of the Madagascan sunset moth. <i>Journal of the Royal Society Interface</i> , 2008, 5, 457-464. | 1.5 | 48 |
| 4 | Discovery of a diamond-based photonic crystal structure in beetle scales. <i>Physical Review E</i> , 2008, 77, 050904. | 0.8 | 200 |
| 5 | An epicuticular multilayer reflector generates the iridescent coloration in chrysidid wasps (Hymenoptera, Chrysididae). <i>Die Naturwissenschaften</i> , 2009, 96, 983-986. | 0.6 | 11 |
| 6 | Measuring and modelling optical scattering and the colour quality of white pierid butterfly scales. <i>Optics Express</i> , 2009, 17, 14729. | 1.7 | 35 |
| 7 | Insect monitoring with fluorescence lidar techniques: feasibility study. <i>Applied Optics</i> , 2009, 48, 5668. | 2.1 | 44 |
| 8 | Physical methods for investigating structural colours in biological systems. <i>Journal of the Royal Society Interface</i> , 2009, 6, S133-48. | 1.5 | 144 |
| 9 | Gold bugs and beyond: a review of iridescence and structural colour mechanisms in beetles (Coleoptera). <i>Journal of the Royal Society Interface</i> , 2009, 6, S165-84. | 1.5 | 409 |
| 10 | Off-axis holograms recording in photochromic glass. <i>Proceedings of SPIE</i> , 2010, , . | 0.8 | 0 |
| 11 | Dual structural color mechanisms in a scarab beetle. <i>Journal of Morphology</i> , 2010, 271, 1300-1305. | 0.6 | 17 |
| 12 | Ultranegative angular dispersion of diffraction in quasicrystalline biophotonic structures. <i>Optics Express</i> , 2011, 19, 7750. | 1.7 | 12 |
| 13 | Discovery of ordered and quasi-ordered photonic crystal structures in the scales of the beetle <i>Eupholus magnificus</i> . <i>Optics Express</i> , 2011, 19, 11355. | 1.7 | 85 |
| 14 | An introduction to biomimetic photonic design. <i>Europhysics News</i> , 2011, 42, 20-23. | 0.1 | 9 |
| 15 | Photonic nanoarchitectures in butterflies and beetles: valuable sources for bioinspiration. <i>Laser and Photonics Reviews</i> , 2011, 5, 27-51. | 4.4 | 173 |
| 16 | Direct determination of the refractive index of natural multilayer systems. <i>Physical Review E</i> , 2011, 83, 051917. | 0.8 | 68 |
| 17 | Strongly Modified Spontaneous Emission Rates in Diamond-Structured Photonic Crystals. <i>Physical Review Letters</i> , 2011, 107, 143902. | 2.9 | 43 |
| 18 | Dramatic colour changes in a bird of paradise caused by uniquely structured breast feather barbules. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2011, 278, 2098-2104. | 1.2 | 109 |
| 19 | Polarized iridescence of the multilayered elytra of the Japanese jewel beetle, <i>Chrysochroa fulgidissima</i> . <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2011, 366, 709-723. | 1.8 | 133 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 20 | Photonic simulation method applied to the study of structural color in Myxomycetes. Optics Express, 2012, 20, 15139. | 1.7 | 7 |
| 21 | Elucidation and reproduction of the iridescence of a jewel beetle. , 2012, , . | | 1 |
| 22 | Controlling spontaneous emission in bioreplica photonic crystals. Proceedings of SPIE, 2012, , . | 0.8 | 1 |
| 23 | Phase-Adjusting Layers in the Multilayer Reflector of a Jewel Beetle. Journal of the Physical Society of Japan, 2012, 81, 054801. | 0.7 | 27 |
| 24 | Photonic Structures for Coloration in the Biological World. Biological and Medical Physics Series, 2012, , 275-329. | 0.3 | 5 |
| 25 | Natural photonic crystals. Physica B: Condensed Matter, 2012, 407, 4032-4036. | 1.3 | 56 |
| 26 | Sexual Dichromatism of the Damselfly Calopteryx japonica Caused by a Melanin-Chitin Multilayer in the Male Wing Veins. PLoS ONE, 2012, 7, e49743. | 1.1 | 90 |
| 27 | How nature produces blue colors. , 0, , . | | 6 |
| 28 | Elucidating the stop bands of structurally colored systems through recursion. American Journal of Physics, 2013, 81, 253-257. | 0.3 | 6 |
| 29 | Influence of disorders on the optical properties of butterfly wing: Analysis with a finite-difference time-domain method. European Physical Journal B, 2013, 86, 1. | 0.6 | 6 |
| 30 | The fossil record of insect color illuminated by maturation experiments. Geology, 2013, 41, 487-490. | 2.0 | 22 |
| 31 | Biomimetic optical materials: Integration of nature's design for manipulation of light. Progress in Materials Science, 2013, 58, 825-873. | 16.0 | 172 |
| 32 | The taphonomy of colour in fossil insects and feathers. Palaeontology, 2013, 56, 557-575. | 1.0 | 40 |
| 33 | Subtle design changes control the difference in colour reflection from the dorsal and ventral wing-membrane surfaces of the damselfly Matronoides cyaneipennis. Optics Express, 2013, 21, 1479. | 1.7 | 19 |
| 34 | Characterization of the iridescence-causing multilayer structure of the Ceroglossus suturalis beetle using bio-inspired optimization strategies. Optics Express, 2013, 21, 19189. | 1.7 | 6 |
| 35 | Cuticle structure of the scarab beetle Cetonia aurata analyzed by regression analysis of Mueller-matrix ellipsometric data. Optics Express, 2013, 21, 22645. | 1.7 | 47 |
| 36 | Retrieval of relevant parameters of natural multilayer systems by means of bio-inspired optimization strategies. Applied Optics, 2013, 52, 2511. | 0.9 | 7 |
| 37 | Structural Color in Nature. , 2013, , 199-251. | | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 38 | Structural color of a lycaenid butterfly: analysis of an aperiodic multilayer structure. <i>Bioinspiration and Biomimetics</i> , 2013, 8, 045001. | 1.5 | 14 |
| 39 | Light manipulation principles in biological photonic systems. <i>Nanophotonics</i> , 2013, 2, 289-307. | 2.9 | 54 |
| 40 | Mechanisms of Color Production in a Highly Variable Shield-Back Stinkbug, <i>Tectocoris diopthalmus</i> (Heteroptera: Scutelleridae), and Why It Matters. <i>PLoS ONE</i> , 2013, 8, e64082. | 1.1 | 22 |
| 41 | Method for retrieving the refractive index of ordered particles from data on the photonic band gap. <i>Journal of Experimental and Theoretical Physics</i> , 2014, 119, 211-226. | 0.2 | 7 |
| 42 | Multilayer manipulated diffraction in flower beetles <i>Torynorrhina flammea</i> : intraspecific structural colouration variation. <i>Journal of Optics (United Kingdom)</i> , 2014, 16, 105302. | 1.0 | 4 |
| 43 | Omnidirectional light absorption of disordered nano-hole structure inspired from <i>Papilio ulysses</i> . <i>Optics Letters</i> , 2014, 39, 4208. | 1.7 | 23 |
| 44 | Coloration and structure of Taiwanese bronze scarab (<i>Anomala expansa</i>). <i>AIP Advances</i> , 2015, 5, . | 0.6 | 2 |
| 45 | Characterization of natural photonic structures by means of optimization strategies. , 2015, , . | | 2 |
| 46 | Bio-inspired iridescent layer-by-layer assembled cellulose nanocrystal Bragg stacks. <i>Journal of Materials Chemistry C</i> , 2015, 3, 4260-4264. | 2.7 | 16 |
| 47 | Wrinkles enhance the diffuse reflection from the dragonfly <i>Rhyothemis resplendens</i> . <i>Journal of the Royal Society Interface</i> , 2015, 12, 20140749. | 1.5 | 19 |
| 48 | Molecular Systematics of the <i>Chrysobothris femorata</i> Species Group (Coleoptera: Buprestidae). <i>Annals of the Entomological Society of America</i> , 2015, 108, 950-963. | 1.3 | 6 |
| 49 | Pretreated Butterfly Wings for Tuning the Selective Vapor Sensing. <i>Sensors</i> , 2016, 16, 1446. | 2.1 | 15 |
| 50 | Impact of cuticle photoluminescence on the color morphism of a male damselfly <i>Ischnura senegalensis</i> (Rambur, 1842). <i>Scientific Reports</i> , 2016, 6, 38051. | 1.6 | 3 |
| 52 | A low-cost, high-efficiency light absorption structure inspired by the <i>Papilio ulysses</i> butterfly. <i>RSC Advances</i> , 2017, 7, 22749-22756. | 1.7 | 13 |
| 53 | Circularly polarized reflection from the scarab beetle <i>Chalcothea smaragdina</i> : light scattering by a dual photonic structure. <i>Interface Focus</i> , 2017, 7, 20160129. | 1.5 | 19 |
| 54 | Optically ambidextrous circularly polarized reflection from the chiral cuticle of the scarab beetle <i>Chrysina resplendens</i> . <i>Journal of the Royal Society Interface</i> , 2017, 14, 20170129. | 1.5 | 27 |
| 55 | Covert linear polarization signatures from brilliant white two-dimensional disordered wing structures of the phoenix damselfly. <i>Journal of the Royal Society Interface</i> , 2017, 14, 20170036. | 1.5 | 9 |
| 56 | Development of structural colour in leaf beetles. <i>Scientific Reports</i> , 2017, 7, 1373. | 1.6 | 32 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 57 | Photonics in Nature: From Order to Disorder. <i>Biologically-inspired Systems</i> , 2017, , 53-89. | 0.4 | 14 |
| 58 | Functional Surfaces in Biology III. <i>Biologically-inspired Systems</i> , 2017, , . | 0.4 | 4 |
| 59 | Determination of the spectral-dependent refractive index of a single layer in a natural multilayer system: comparison of different approaches. <i>Applied Optics</i> , 2017, 56, 1807. | 2.1 | 2 |
| 60 | Photonic crystal micro-pixelation and additive color mixing in weevil scales. <i>Bioinspiration and Biomimetics</i> , 2018, 13, 035003. | 1.5 | 6 |
| 61 | Investigating Nanoscopic Structures on a Butterfly Wing To Explore Solvation and Coloration. <i>Journal of Chemical Education</i> , 2018, 95, 1004-1011. | 1.1 | 12 |
| 62 | Photonic Monitoring of Atmospheric and Aquatic Fauna. <i>Laser and Photonics Reviews</i> , 2018, 12, 1800135. | 4.4 | 41 |
| 63 | Polarizing Natural Nanostructures. <i>Springer Series in Surface Sciences</i> , 2018, , 247-268. | 0.3 | 2 |
| 64 | Bioinspired Melanin-Based Optically Active Materials. <i>Advanced Optical Materials</i> , 2020, 8, 2000932. | 3.6 | 77 |
| 65 | Optical costs and benefits of disorder in biological photonic crystals. <i>Faraday Discussions</i> , 2020, 223, 9-48. | 1.6 | 16 |
| 66 | Spatio-Temporal Color Differences Between Urban and Rural Populations of a Ground Beetle During the Last 100 Years. <i>Frontiers in Ecology and Evolution</i> , 2020, 7, . | 1.1 | 4 |
| 67 | Additive and subtractive modification of butterfly wing structural colors. <i>Colloids and Interface Science Communications</i> , 2021, 40, 100346. | 2.0 | 9 |
| 68 | An Environmental Perception Self-Adaptive Discolorable Hydrogel Film toward Sensing and Display. <i>Advanced Optical Materials</i> , 2021, 9, 2100116. | 3.6 | 11 |
| 69 | Polarizing Natural Nanostructures. <i>Springer Series in Surface Sciences</i> , 2014, , 155-169. | 0.3 | 1 |
| 70 | Structural color of the lepidopteran scale: optical effects of microstructure, curvature and overlap of the scales. <i>Hikaku Seiri Seikagaku(Comparative Physiology and Biochemistry)</i> , 2008, 25, 86-95. | 0.0 | 2 |
| 71 | Responsive Photonic Crystals with Tunable Structural Color. <i>Engineering Materials and Processes</i> , 2017, , 151-172. | 0.2 | 0 |
| 72 | The structural colors of the Blue butterflies: from sexual signaling to chemically selective vapor sensing. , 2019, , . | | 0 |
| 74 | A combination of red structural and pigmentary coloration in the eyespot of a copepod. <i>Journal of the Royal Society Interface</i> , 2022, 19, . | 1.5 | 3 |
| 75 | Polarization-dependent reflection of I-WP minimal-surface-based photonic crystal. <i>Physical Review E</i> , 2022, 106, . | 0.8 | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 76 | Structural colors of blue butterflies: from photonic nanoarchitectures to DNA. , 2022, , . | | 1 |
| 77 | Revealing the Wonder of Natural Photonics by Nonlinear Optics. Biomimetics, 2022, 7, 153. | 1.5 | 2 |
| 78 | Wide-gamut structural colours on oakblue butterflies by naturally tuned photonic nanoarchitectures. Royal Society Open Science, 2023, 10, . | 1.1 | 3 |