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CORRECTION Open Access

Correction: Deep learning in optical metrology: a review

Chao Zuo, Jiaming Qian, Shijie Feng, Wei Yin, Yixuan Li, Pengfei Fan, Jing Han, Kemao Qian and Qian Chen

Correction to: *Light: Science & Applications*
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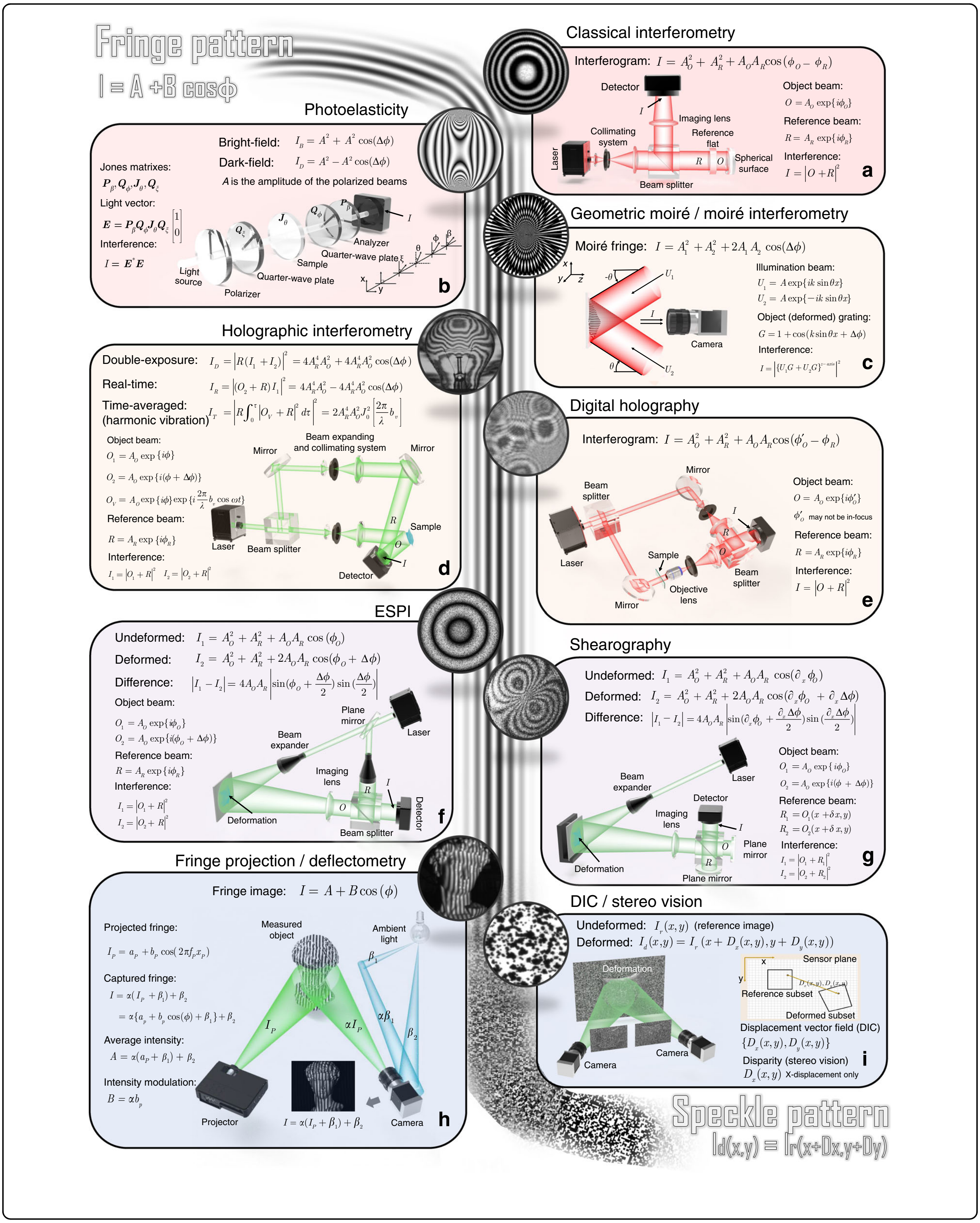
Following publication of this article[1], it is noticed that some brackets are missing in the mathematical expressions in Fig. 1. Updated Fig. 1 is provided in this Correction.


Fringe pattern
I = A + B cosφ
Photoelasticity
Bright-field:
Dark-field:
A is the amplitude of the polarized beams
Jones matrixes:
Light vector:
Interference:
Light source
Polarizer
Quarter-wave plate
Sample
Quarter-wave plate
Analyzer
b
Holographic interferometry
Double-exposure:
Real-time:
Time-averaged: (harmonic vibration)
Object beam:
Reference beam:
Interference:
Mirror
Beam expanding and collimating system
Mirror
Laser
Beam splitter
Sample
Detector
d
ESPI
Undeformed:
Deformed:
Difference:
Object beam:
Reference beam:
Interference:
Plane mirror
Laser
Beam expander
Imaging lens
Deformation
Beam splitter
Detector
f
Fringe projection / deflectometry
Fringe image:
Projected fringe:
Captured fringe:
Average intensity:
Intensity modulation:
Measured object
Ambient light
Projector
Camera
h
Classical interferometry
Interferogram:
Detector
Imaging lens
Collimating system
Reference flat
Spherical surface
Laser
Beam splitter
Object beam:
Reference beam:
Interference:
a
Geometric moiré / moiré interferometry
Moiré fringe:
Illumination beam:
Object (deformed) grating:
Interference:
Camera
c
Digital holography
Interferogram:
Mirror
Beam splitter
Laser
Sample
Objective lens
Mirror
Beam splitter
Object beam:
may not be in-focus
Reference beam:
Interference:
e
Shearography
Undeformed:
Deformed:
Difference:
Object beam:
Reference beam:
Interference:
Laser
Beam expander
Detector
Imaging lens
Plane mirror
Deformation
Plane mirror
g
DIC / stereo vision
Undeformed: (reference image)
Deformed:
Deformation
Sensor plane
Reference subset
Deformed subset
Displacement vector field (DIC)
Disparity (stereo vision)
X-displacement only
Camera
Camera
i
Speckle pattern
Id(x,y) = Ir(x+Dx,y+Dy)

The original article has been updated.

Published online: 27 March 2022

Reference

1. Zuo, C. et al. Deep learning in optical metrology: a review. *Light Sci. Appl.* **11**, 39, https://doi.org/10.1038/s41377-022-00714-x (2022).