

OPEN ACCESS

EDITED AND REVIEWED BY Shinichi Saito, Hitachi, Japan

*CORRESPONDENCE
Steen G. Hanson,

☑ vsgh@fotonik.dtu.dk

RECEIVED 19 October 2023 ACCEPTED 27 November 2023 PUBLISHED 07 December 2023

CITATION

Angelsky OV, Bekshaev AY, Hanson SG, Zenkova CY, Mokhun II and Zheng J (2023), Corrigendum: Structured light: ideas and concepts. *Front. Phys.* 11:1324272. doi: 10.3389/fphy.2023.1324272

COPYRIGHT

© 2023 Angelsky, Bekshaev, Hanson, Zenkova, Mokhun and Zheng. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

Corrigendum: Structured light: ideas and concepts

Oleg V. Angelsky^{1,2}, Aleksandr Y. Bekshaev³, Steen G. Hanson^{4*}, Claudia Yu. Zenkova^{1,2}, Igor I. Mokhun² and Jun Zheng¹

¹Research Institute of Zhejiang University—Taizhou, Taizhou, China, ²Chernivtsi National University, Chernivtsi, Ukraine, ³Physics Research Institute, Odessa I.I. Mechnikov National University, Odessa, Ukraine, ⁴DTU Fotonik, Department of Photonics Engineering, Roskilde, Denmark

KEYWORDS

singular optics, optical vortex, polarization singularity, dynamical characteristics, paraxial beams, evanescent fields, optical manipulation, optical data processing

A Corrigendum on

Structured light: ideas and concepts

by Angelsky OV, Bekshaev AY, Hanson SG, Zenkova CY, Mokhun II and Jun Z (2020). Front. Phys. 8: 114. doi: 10.3389/fphy.2020.00114

In the published article, an **Author name** was incorrectly written as "Zheng Jun." The correct spelling is "Jun Zheng."

In the published article, there were errors.

- 1) In the first paragraph of Section "PRINCIPLES OF THE STRUCTURED LIGHT DESCRIPTION: PARAXIAL MODEL," the sign in the exponent $\exp(i \omega t)$ is incorrect, and the relation between the exponent and the time-invariant vectors $\mathbf{E}(\mathbf{R})$, $\mathbf{H}(\mathbf{R})$ is not clear:
- 2) In Equation 32, the first equality is incorrect;
- In Section "AUTHOR CONTRIBUTIONS," the initials of the author Jun Zheng are erroneous.
- 1) A correction has been made to "PRINCIPLES OF THE STRUCTURED LIGHT DESCRIPTION: PARAXIAL MODEL," Paragraph 1. This sentence previously stated:

"In general, this set of features must include the spectral characteristics, but in this review, we restrict ourselves to the case of monochromatic fields whose temporal dependence can be expressed by the complex exponential $\exp(i \omega t)$ where ω is the light frequency."

The corrected sentence appears below:

"In general, this set of features must include the spectral characteristics, but in this review, we restrict ourselves to the case of monochromatic fields whose temporal dependence can be expressed by the complex exponential $\exp(-i\,\omega\,t)$ where ω is the light frequency, and instantaneous electric and magnetic fields are determined as $\operatorname{Re}[\mathbf{E}(\mathbf{R})\exp(-i\omega t)]$, $\operatorname{Re}[\mathbf{H}(\mathbf{R})\exp(-i\omega t)]$."

2) A correction has been made to "DYNAMICAL CHARACTERISTICS OF STRUCTURED OPTICAL FIELDS," "Dynamical Characteristics of the Paraxial Fields," Equation 32. This equation previously stated:

$$s_3 = -i|\mathbf{u}^* \times \mathbf{u}| = -i(u_x^* u_y - u_y^* u_x) = |u_+|^2 - |u_-|^2$$
(32)

Angelsky et al. 10.3389/fphy.2023.1324272

The corrected equation appears below:

$$s_3 = -i\mathbf{e}_z (\mathbf{u}^* \times \mathbf{u}) = -i(u_x^* u_y - u_y^* u_x) = |u_+|^2 - |u_-|^2$$
 (32)

3) Two corrections have been made to **Author Contributions**. The sentences previously stated:

"AB and ZJ organized the database. ZJ and AB contributed to section Surface Plasmon–Polaritons."

The corrected sentences appear below:

"AB and JZ organized the database. JZ and AB contributed to section Surface Plasmon–Polaritons".

The authors apologize for these errors and state that they do not change the scientific conclusions of the article in any way. The original article has been updated.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.