OPEN

Author Correction: Boundary integral equation method for resonances in gradient index cavities designed by conformal transformation optics

Jung-Wan Ryu, Jinhang Cho, Soo-Young Lee, Yushin Kim, Sang-Jun Park, Sunghwan Rim, Muhan Choi & Inbo Kim

Correction to: *Scientific Reports* <https://doi.org/10.1038/s41598-019-55572-2>, published online 23 December 2019

The Author Contributions section in this Article is incorrect.

“The late S.-Y.L. conceived the original idea. J.-W.R., S.-Y.L., M.C. and I.K. formulated the method. J.-W.R., J.C., Y.K. and S.-J.P. performed numerical calculation. J.-W.R., J.C., S.R., M.C. and I.K. wrote the manuscript. All authors analyzed the data, discussed the results and provided feedback for the manuscript.”

should read:

“The late S.-Y.L. conceived the original idea for this BEM. J.-W.R., S.-Y.L., M.C. and I.K. formulated the method. J.-W.R., J.C., Y.K. and S.-J.P. performed numerical calculation. J.-W.R., J.C., S.R., M.C. and I.K. wrote the manuscript. All authors analyzed the data, discussed the results and provided feedback for the manuscript.”

Also, this Article contains an error in the Conclusion section.

“In order to obtain the resonant mode functions in TCs designed by conformal TO, we have developed a pure BEM based on the fact that the Green’s functions of interior and exterior regions are known in the RV and the physical spaces, respectively, which are connected by a conformal mapping. For the verification of our BEM, we have respectively, which are connected by a conformal mapping. For the verification of our BEM, we have calculated resonant modes in limaçon-shaped TCs and compared those with the corresponding results from FEM.”

should read:

“In order to obtain the resonant mode functions in TCs designed by conformal TO, we have developed a pure BEM based on the fact that the Green’s functions of interior and exterior regions are known in the RV space and the physical space, respectively, which are connected by a conformal mapping. For the verification of our BEM, we have calculated resonant modes in limaçon-shaped TCs and compared those with the corresponding results from FEM.”

Published online: 08 January 2021

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

© The Author(s) 2021