Review of: "New Perspectives on the Roots of Real Polynomials of Degree n and Number Theory"

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Potential competing interests: No potential competing interests to declare.

The submission is devoted to some results on the real and complex roots of real polynomials, and it is very ambitious.

The context presented in the abstract is clear and well-written, as is the introduction. However, it could be useful to explore the object also by using different points of view, such as the study of it by using orthogonal polynomials and special functions, especially through the tools of operators theory, so that it could be useful to draw some points and then cite the following papers:

[1] G. Dattoli, P. E. Ricci, and C. Cesarano. The Lagrange Polynomials, the
Associated Generalizations, and the Umbral Calculus. Integral Transforms
and Special Functions. 14(2), pp. 181-186,

[2] G. Dattotli, S. Lorenzutta, and C. Cesarano. Bernstein polynomials and
operational methods. Journal of Computational Analysis and Applications.
8(4), pp. 369-377, (2006).

The other part of the paper is clear and well-written until section 4.

From section 5, it is not clear and must be rewritten to better understand the high result obtained. In particular, it is necessary to make a parallel with the original proof of the Theorem.