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Chen’s $\delta$-invariants type inequalities for bi-slant submanifolds in generalized Sasakian space forms. (English) J. Geom. Phys. 161, Article ID 104040, 9 p. (2021).

Summary: In this paper, we establish optimal inequalities involving generalized $\delta$-Casorati curvature $\delta C(k; s - 1)$ for the bi-slant submanifolds of generalized Sasakian space forms endowed with a quarter-symmetric connection. The equality case is discussed for ideal submanifolds. Furthermore, the special cases of derived inequality is given for C-totally real submanifolds and some other classes of submanifolds.

MSC:
53C40 Global submanifolds
53B25 Local submanifolds
53C15 General geometric structures on manifolds (almost complex, almost product structures, etc.)
53C25 Special Riemannian manifolds (Einstein, Sasakian, etc.)

Keywords:
Casorati curvature; $\delta$-invariants; quarter-symmetric connection; Sasakian manifold; bi-slant submanifold; ideal submanifold

Full Text: DOI

References:
[10] Chen, B.-Y.; Yildirim, H., Classification of ideal submanifolds of real space forms with type number $\langle \delta(e^2) \rangle$, J. Geom. Phys., 92, 167-180 (2015) · Zbl 1326.53078
(2015) - Zbl 1326.53025


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