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The Cenozoic Gonyaulacacean Dinoflagellate Genera Operculodinium Wall, 1967 and Protoceratium Bergh, 1881 and their Phylogenetic

Paez, M.

Relationships, 2014.

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- Haj Salton, F. Paleoceanography across the Piliocene-Pleistocene transition in the southern Bering Sea: Dinoflagellate cysts and acritarchs from IODP Site U1341, 2021.
- Farmani, Taghi Paleoceanography and dinoflagellate cyst record of northwestern North Pacific ODP Site 882 during the Pliocene-Pleistocene transition, 2021.
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