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Florian Enescu* (fenescu@gsu.edu), Department of Mathematics and Statistics, 25 Park Place, Georgia State Univ, Atlanta, GA 30303, and **Yongwei Yao**. *Graded rings of rational twist in prime characteristic*. Preliminary report.

We study the generating function associated to complexity sequence of the twisted construction of a \mathbb{N} -graded ring. We regard this as an object reflecting the properties of the ring and its grading and perform a detailed analysis of the case of the polynomial ring with general \mathbb{N} -grading. Applications to the Frobenius complexity of determinantal rings are provided. (Received August 16, 2020)