1163-13-1183 J. R. Juett* (jjuett@dbq.edu), Christopher Park Mooney and Lois W. Ndungu. Unique factorization of ideals in commutative rings with zero divisors.

"Unique factorization" was central to the initial development of ideal theory. We update this topic with several new results concerning notions of "unique ideal factorization rings" with zero divisors. Along the way, we obtain new characterizations of several well-known kinds of rings in terms of their ideal factorization properties and examine when monoid rings satisfy various kinds of "unique ideal factorization." (Received September 15, 2020)