

Chen, Xueyou**Concept lattice on cubic sets.** (English) [Zbl 1474.06021](#)[Ann. Fuzzy Math. Inform. 21, No. 1, 29-37 \(2021\)](#).

Summary: In 2012, *Y. B. Jun* et al. [[Ann. Fuzzy Math. Inform. 4, No. 1, 83–98 \(2012; Zbl 1301.03048\)](#)] introduced the notion of a cubic set, which is a generalization of Zadeh's fuzzy set. In 1999, *B. Ganter* and *R. Wille* [[Formal concept analysis. Mathematical foundations. Transl. from the German by Cornelia Franzke. Berlin: Springer \(1999; Zbl 0909.06001\)](#)] put forward formal concept analysis theory (FCA), formal context, concept lattice are two main notions and tools. In the paper, we define formal context, Galois connection, concept lattice on cubic sets, and generalize formal concept analysis theory on cubic sets structure.

MSC:**06B23** Complete lattices, completions**06A15** Galois correspondences, closure operators (in relation to ordered sets)**68T30** Knowledge representation**Keywords:**[Galois connection](#); [concept lattice](#); [cubic set](#)**Full Text:** [DOI](#)