

Chajda, Ivan; Halaš, Radomír; Kühr, Jan

Semilattice structures. (English) Zbl 1117.06001

Research and Exposition in Mathematics 30. Lemgo: Heldermann Verlag (ISBN 978-3-88538-230-0/pbk). vi, 228 p. (2007).

Although there exist a lot of good monographs on lattice theory, this is not the case for semilattices. The present monograph tries to fill this gap. The book is well organized and contains a lot of recent results. It mainly covers the theory of semilattices and of special classes of semilattices such as pseudocomplemented semilattices, relatively pseudocomplemented semilattices, sectionally pseudocomplemented semilattices and residuated semilattices. Moreover, also connected structures such as implication algebras, Hilbert algebras, directoids, MV-algebras and BCC-algebras are treated. So the reader obtains a good insight into semilattices and other general structures connected with them. A great deal of the latter were recently investigated and are motivated by logic. The book contains many results that were originally obtained by the authors. It is a valuable source for algebraists as well as for logicians that want to improve their knowledge on semilattices and related structures.

Reviewer: [Helmut Länger \(Wien\)](#)

MSC:

- [06-02](#) Research exposition (monographs, survey articles) pertaining to ordered structures
- [06A12](#) Semilattices
- [03G25](#) Other algebras related to logic
- [08A05](#) Structure theory of algebraic structures

Cited in **3** Reviews
Cited in **27** Documents

Keywords:

semilattice; pseudocomplement; relative pseudocomplement; sectional pseudocomplement; residuated semilattice; implication algebra; Hilbert algebra; directoid; MV-algebra; BCC-algebra