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	Titolo	The equationally-defined commutator : a study in equational logic and algebra / / by Janusz Czelakowski
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	ISBN	3-319-21200-1
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	Descrizione fisica	1 online resource (297 p.)
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	Soggetti	Group theory
		Commutative algebra
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		Associative rings
		Rings (Algebra)
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	Nota di bibliografia	Includes bibliographical references and indexes.
	Nota di contenuto	Introduction -- Basic Properties of Quasivarieties -- Commutator Equations and the Equationally Defined Commutator -- Centralization Relations -- Additivity of the Equationally Defined Commutator -- Modularity and Related Topics -- Additivity of the Equationally Defined Commutator and Relatively Congruence-Distributive Dub quasivarieties -- More on Finitely Generated Quasivarieties -- Commutator Laws in Finitely Generated Quasivarieties -- Appendix 1: Algebraic Lattices -- Appendix 2: A Proof of Theorem 3.3.4 for Relatively Congruence-Modular Quasivarieties -- Appendix 3: Inferential Bases for Relatively Congruence-Modular Quasivarieties.
	Sommario/riassunto	This monograph introduces and explores the notions of a commutator equation and the equationally-defined commutator from the perspective of abstract algebraic logic. An account of the commutator operation associated with equational deductive systems is presented, with an emphasis placed on logical aspects of the commutator for

equational systems determined by quasivarieties of algebras. The author discusses the general properties of the equationally-defined commutator, various centralization relations for relative congruences, the additivity and correspondence properties of the equationally-defined commutator, and its behavior in finitely generated quasivarieties. Presenting new and original research not yet considered in the mathematical literature, The Equationally-Defined Commutator will be of interest to professional algebraists and logicians, as well as graduate students and other researchers interested in problems of modern algebraic logic.