1. Record Nr. UNINA9910299480903321 Autore Madhusudana Chakravarti V Titolo Thermal contact conductance / / Chakravarti V. Madhusudana Pubbl/distr/stampa Cham [Switzerland]:,: Springer,, 2014 **ISBN** 3-319-01276-2 Edizione [2nd ed. 2014.] 1 online resource (xviii, 260 pages) : illustrations (some color) Descrizione fisica Mechanical Engineering Series, , 0941-5122 Collana Disciplina 621.402 621.402/2 621.4021 Soggetti Heat - Conduction Surfaces (Technology) Mechanical engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "ISSN: 0941-5122." Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction -- Thermal Constriction Resistance -- Solid Spot Thermal Conductance of a Joint -- Gap Conductance at the Interface.-Experimental Aspects -- Special Configurations and Processes --Control of Thermal Contact Conductance Using Interstitial Materials and Coatings -- Major Applications -- Additional Topics -- Concluding Remarks. Sommario/riassunto This book covers both theoretical and practical aspects of thermal contact conductance. The theoretical discussion focuses on heat transfer through spots, joints, and surfaces, as well as the role of interstitial materials (both planned and inadvertent). The practical discussion includes formulae and data that can be used in designing heat-transfer equipment for a variety of joints, including special geometries and configurations. The material included in this edition has been updated to reflect the latest advances in the field.