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Résumé ou extrait : "Wearable exoskeletons are electro-mechanical systems designed to assist, augment, or enhance motion and mobility in a variety of human motion applications and scenarios. The applications, ranging from providing power supplementation to assist the wearers to situations where human motion is resisted for exercising applications, cover a wide range of domains such as medical devices for patient rehabilitation training recovering from trauma, movement aids for disabled persons, personal care robots for providing daily living assistance, and reduction of physical burden in industrial and military applications. The development of effective and affordable wearable exoskeletons poses several design, control and modelling challenges to researchers and manufacturers. Novel technologies are therefore being developed in adaptive motion controllers, human-robot interaction control, biological sensors and actuators, materials and structures, etc. In this book, the authors report recent advances and technology breakthroughs in exoskeleton developments. It will be of interest to engineers and researchers in academia and industry as well as manufacturing companies interested in developing new markets in wearable exoskeleton robotics." (source : 4e de couv.)

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Robots -- Systèmes de commande
Systèmes homme-machine