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| Descrizione fisica      | 1 online resource (200 p.)   |
| Altri autori (Persone)  | RyvkinSergey E<br>Palomar LeverEduardo   |
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| Soggetti                | Electric motors, Synchronous - Automatic control<br>Electric motors - Electronic control<br>Sliding mode control   |
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| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Description based upon print version of record.  |
| Nota di bibliografia    | Includes bibliographical references and index.   |
| Nota di contenuto       | 1. Problem statement -- 2. Sliding mode in nonlinear dynamic systems -- 3. State vector estimation -- 4. Synchronous drive control design -- 5. Multidimensional switching regularization -- 6. Mechanical coordinates observers -- 7. Digital control -- 8. Practical examples of drive control.  |
| Sommario/riassunto      | This volume presents the theory of control systems with sliding mode applied to electrical motors and power converters. It demonstrates the methodology of control design and the original algorithms of control and observation. Practically all semiconductor devices are used in power converters, that feed electrical motors, as power switches. A switching mode offers myriad attractive, inherent properties from a control viewpoint, especially a sliding mode. Sliding mode control supplies high dynamics to systems, invariability of systems to changes of their parameters and of exterior loads in combi |