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| Autore                  | Gromak V. I (Valerii Ivanovich)  |
| Titolo                  | Painleve differential equations in the complex plane [[electronic resource] /] / Valerii I. Gromak, Ilpo Laine, Shun Shimomura   |
| Pubbl/distr/stampa      | Berlin ; ; New York, : Walter de Gruyter, c2002  |
| ISBN                    | 1-282-19434-8<br>9786612194344<br>3-11-019809-6  |
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| Descrizione fisica      | 1 online resource (312 p.)   |
| Collana                 | De Gruyter studies in mathematics ; ; 28   |
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| Altri autori (Persone)  | Lainellpo<br>ShimomuraShun   |
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| Soggetti                | Painleve equations<br>Functions of complex variables<br>Electronic books.  |
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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 (p. [283]-299) and index.  |
| Nota di contenuto       | Frontmatter -- Contents -- Chapter 1. Meromorphic nature of solutions -- Chapter 2. Growth of Painlevé transcedents -- Chapter 3. Value distribution of Painlevé transcedents -- Chapter 4. The first Painlevé equation (P1) -- Chapter 5. The second Painlevé equation (P2) -- Chapter 6. The fourth Painlevé equation (P4) -- Chapter 7. The third Painlevé equation (P3) -- Chapter 8. The fifth Painlevé equation (P5) -- Chapter 9. The sixth Painlevé equation (P6) -- Chapter 10. Applications of Painlevé equations -- Appendix A. Local existence and uniqueness of solutions of complex differential equations -- Appendix B. Basic notations and facts in the Nevanlinna theory -- Backmatter |
| Sommario/riassunto      | This book is the first comprehensive treatment of Painleve differential equations in the complex plane. Starting with a rigorous presentation for the meromorphic nature of their solutions, the Nevanlinna theory will be applied to offer a detailed exposition of growth aspects and value distribution of Painleve transcedents. The subsequent main part of the book is devoted to topics of classical background such as representations and expansions of solutions, solutions of special type like rational and special transcendental solutions, Backlund   |

transformations and higher order analogues, treated

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