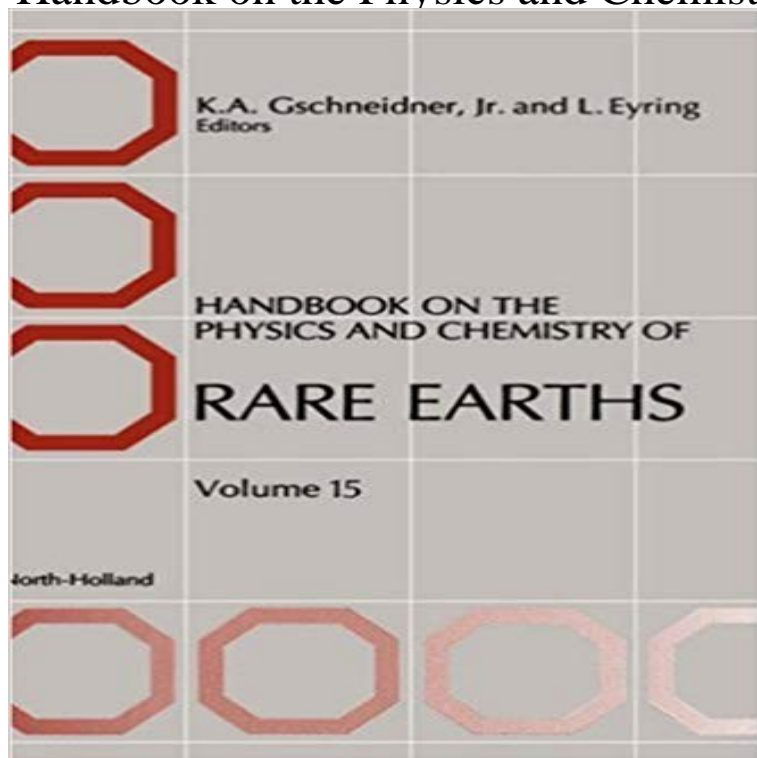


## Handbook on the Physics and Chemistry of Rare Earths, Volume 15



Volume 15 in this series continues the voyage of discovery started almost a decade ago. Chapter 98 adds significantly to an evaluation of systematic, experimental low-temperature studies of the ambivalent behaviours of cerium (ferromagnetism, antiferromagnetism, spin glass, superconductivity etc.) which depend upon its environment in materials. The conclusions arrived at should provide new data against which the theory can be advanced. The next chapter provides a review of rare earth carbides, emphasizing the thermodynamics, phase diagrams, crystal structures and physical properties. The binary rare earth carbides present an exceptionally wide range of compositions and structures both as solids and gas-phase molecules. Complex carbides with additional metal and non-metal components also receive attention. Metal-rich halides (i.e. compounds with an X/R ratio Chapter 101 deals with the preparation, structure, chemical and physical properties of heavy-metal fluoride glasses. Large amounts of rare earths can be added into these, and they possess a great potential for optical applications in the mid-infrared range as fiber optic glasses for communication and transmission of information, optical wave guides, fiber lasers and sensors. The following chapter explores the chemical kinetics of solvent and ligand exchange in aqueous lanthanide solutions. A wealth of tabulated information on rate and equilibrium constants is provided in textual and tabular form. Chapter 103 considers the fundamentally important reactions of the lanthanide ions with water. These interactions are discussed for both solids and solutions. The hydrated species are considered in detail for the aqueous solution, revealing the consequences of the lanthanide series sequence. The concluding chapter reviews macrocyclic complexes

formed by rare earth and dioxouranium ions as templates. Synthetic trends and reactivity are considered as well as potential uses of these intriguing wrap-around structures.

[\[PDF\] Genomics \(Nursing Clinics of North America\)](#)

[\[PDF\] Barefoot Book of Animal Tales from Around the World](#)

[\[PDF\] Viewing the Holocaust Today \(Holocaust \(Heinemann Hardcover\)\)](#)

[\[PDF\] Freeze Frame: A Photographic History of the Winter Olympics](#)

[\[PDF\] Language and meaning of flowers](#)

[\[PDF\] The Complete Guide to Brewing Your Own Beer at Home: Everything You Need to Know Explained Simply \(Back to Basics\)](#)

[\[PDF\] Tagebuch eines Minecraft Skeletts! \(Buch 21\) Inoffizielle Minecraft Bucher \(Minecraft Bucher fur Kinder\) \(German Edition\)](#)

**Handbook on the Physics and Chemistry of Rare Earths Vol 23** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths Vol 2, Pgs** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths, Volume 15** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths** Handbook on the Physics and Chemistry of Rare Earths Volume 12, Pages 1-486 (1989). ISBN: 978-0-444-87105-3 Volume 15 pp. 1-530 (1991). Entitled to **Handbook on the Physics and Chemistry of Rare Earths Vol 1, Pgs** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths, Volume 44** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths Vol 23** Handbook on the Physics and Chemistry of Rare Earths Volume 50, Pages 2-427 (2016). Including Actinides. Edited by Jean-Claude G. Bunzli and Vitalij K. **Handbook on the Physics and Chemistry of Rare Earths Vol 33** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high PDF (15 K) Chapter 174 Crystal structures and crystal chemistry of ternary rare-earth germanides. **Handbook on the Physics and Chemistry of Rare Earths Vol 22** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths Vol 49** The online version of

Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths Vol 3, Pgs** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths Vol 19** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths Vol 6, Pgs** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths Vol 43** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed full-text journals. Volume 15 pp. 1-530 (1991). Entitled to full text. Volume 14 pp. **Handbook on the Physics and Chemistry of Rare Earths Vol 29** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths, volume 26** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths Vol 12** The online version of Handbook on the Physics and Chemistry of Rare Earths at Volume 50, Pages 2-427 (2016) Volume 15 . Chapter 291 - Rare Earth Coordination Chemistry in Action: Exploring the Optical and Magnetic Properties of **Handbook on the Physics and Chemistry of Rare Earths Vol 19** Handbook on the Physics and Chemistry of Rare Earths Volume 23, Pages 1-648 (1996) Volume 50 pp. The Role of Rare Earths in Catalysis Volume 15 **Handbook on the Physics and Chemistry of Rare Earths Vol 26** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths Vol 27** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Handbook on the Physics and Chemistry of Rare Earths, Volume 48** Purchase Handbook on the Physics and Chemistry of Rare Earths, Volume 48 - 1st Edition. Print Book & E-Book. ISBN 9780444634832, 9780444634849. **Handbook on the Physics and Chemistry of Rare Earths Vol 28** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed **Book Series: Handbook on the Physics and Chemistry of Rare Earths** Handbook on the Physics and Chemistry of Rare Earths. VoL 26 edited by K.A. . Magnetic properties of intermetallic compounds of rare earth metals 55. 15. **Handbook on the Physics and Chemistry of Rare Earths Vol 21** Purchase Handbook on the Physics and Chemistry of Rare Earths, Volume 15 - 1st Edition. Print Book & E-Book. ISBN 9780444889669, 9780080934211. **Handbook on the Physics and Chemistry of Rare Earths Vol 31** The online version of Handbook on the Physics and Chemistry of Rare Earths at , the worlds leading platform for high quality peer-reviewed