

Table of Contents

Foreword

Rare Earth Minerals in Conception of Granites Genesis R. Sobolev	1
The Geology of the Bayan Obo Iron-Rare-Earth-Niobium Deposits, Inner Mongolia, China L.J. Drew, M. Qingrun and S. Weijun	13
The Geological Characteristics and the Prospecting Criteria of the Granite-Weathering Crust Ion Adsorption Type Ree Deposits in Nanling Area, South China P. Shaomei	33
Rare-Earth Minerals and their Crystal Structures Y. Kanazawa and R. Miyawaki	43
The Content of Rare Earth Elements in Amang from Selected Mines in Malaysia K. Hussin, A. Abdul Aziz, M. Ibrahim and M.Y. Sulaiman	81
A Study on Ree Geochemistry of Thong Lang Granites in Uthai Thani Province, Thailand S. Nakapadungrat	91
Classification of Rare-Earth Element (REE) Deposits in Thailand - a Genetic Approach P. Charusiri, C. Khantaprab, V. Pisutha-Arnon and S. Yumuang	105
Australian Rare Earth Resources for the Electronics Industry R.K.A. Taylor	125
Supply and Demand of Rare Earths in Japan T. Ezawa	137
Rare Earth Minerals in the Union of Myanmar U.K. Thein	149
Rare Earth Mineral Occurrences and Potential of Zambia S.H. Mambwe and F.N. Mwape	151
A Study on the Rare Earth Minerals in China Z.G. Wang	173
Rare Earth Resources and the Problems M. Kamitani	181
Rare Earths Potential in Malawi G.W.P. Malunga, J. Samama and R. Houot	193
Design Calculation for Multicomponent Rare Earth Separation by Solvent Extraction - Equivalent Composition - Equivalent Separation Factor Method Z.H. Wang	205
Separation of Microlite from Cassiterite and Zircon P. Meechumna	211
Extraction of Rare Earth Elements by Alkali Hydrothermal Process S. Toyoda, K. Ito and M. Tokuda	221
New Method for Separating Rare Earth Metals Study on Technological Conditions for the Application of an Cation-Exchange Fiber in Separation of Sm from Gd H. Wei-Xiong, L. Yun and W. Zhi-Han	235
Beneficiation of Rare Earth Oxide Minerals C.J. Ferron, S.M. Bulatovic and R.S. Salter	251
Mining, Refining and Marketing of Bastnasite and its Separated Products T.A. Wilson	271
Magnetic Separation of Monazite and Xenotime S. Ito, H. Yotsumoto and H. Sakamoto	279
Recovery of Rare Earth Minerals, with Emphasis on Flotation Process R. Houot, J. Cuif, Y. Mottot and J. Samama	301
The MMAJ Rare Earth R&D Project T. Ito	325
New Developments in the Processing of Rare Earths T. Tran	337

The Study on the Preparation and Reaction Kinetics of Iron Oxide Powder from Spent Pickling Solution J.C. Chung, T.M. Chiu and Y.C. Hoh	355
Solution Chemistry and Separation of Metal Ions in Leached Solution J. Shibata	365
Study on Separation of Sm, Eu, Gd, Tb by Extraction Chromatography Z. Dong, L. Yanzhou and P. Taiming	379
An Overview of the Rare-Earth Mineral Processing Industry in Malaysia M.Y. Sulaiman	389
Rare Earth Doping Effect in GaSb V.H. Le and V.I. Fistul	397
An Overview of Rare Earth Minerals Supply and Applications M. O'Driscoll	409
Yttrium, its Separation and Application Q. Su	421
Development of High Strength Cast Iron with Thin Section by Using Rare Earth Metals H. Horie, T. Kowata and P. Kijtanamongkolchai	433
Rare Earth-Aluminium Piston Z. Yuanfu and L. Shanfeng	449
A Technical Process of Manufacturing the RE-Al-Mg-Si Alloy Window Screening H.J. Min	457
A Redetermination of the La-Ni Phase Diagram from LaNi to LaNi₅ (50 to 83.3 at .%Ni) D.Y. Zhang, J. Tang and K.A. Gschneidner	467
The Ceylon Mineral Sands Industry: Profile and Prospects L. Panditharatna	481
Supply and Potential Markets of Rare Earth Concentrates M.H. Govett and E.G. Thomas	501
The Determination of Ree in Geological Samples and High Pure RE Compounds G.X. Dong and J. Zou	505
Board of Investment's Policy for Electronics Industry P. Sompouti	509
A Glance on the Rare Earth Minerals and Minerals of Afghanistan for Electronic Uses M.A. Sadeq	513
Exploration Guidelines for the Rare Metal Deposits, S-W Thailand P. Suwimonprecha, G. Friedrich and P. Cerny	515
Granitoid Series and REE-Y-Zr-Ta-Nb Mineralization S. Ishihara	527
Thai-Japan Research Cooperation on the Recovery of Rare-Metals from Tin Tailings M. Fujita and Q. Leepawpanth	537
An Overview on Rare Earth Mineral Resources/Reserves of Active Tin Mines in Thailand T. Pungrassami and P. Sanguansai	557
China's Rare Earth Potential, Industry and Policy A.L. Clark and S. Zheng	577
Current Rare Earth Minerals Processing Studies Conducted by the Research Institute of Mineral Dressing and Metal Lurgy (Senken), Tohoku University Y. Omori	603
Behavior of Rare Earth Elements during Water-Rock Interaction in Crystal Surface Environment H. Kamioka and A. Masuda	613
A Multivariate Approach to Geochemical Characteristic of Rare Metal Specialized Granites of Thailand S. Apykul	629
Mineralogical Characteristics of Nam Nam Xe Rare Earth Deposit in Vietnam X.B. Trinh	637
The Occurrences of Rare Earth Minerals in Indonesia S. Johari and K. Umi	645