

REFERENCES

- 1- Blackwell; "*Nomenclature of Inorganic Chemistry*". International Union of Pure and Applied Chemistry, Recommendations 1990, London, p. 43.
- 2- Lee, J.D.; "*Concise Inorganic Chemistry*". Blackie Academic & Professional: New York, 1996, p. 859.
- 3- Habashi, F.; "*The discovery and industrialization of the rare earths*". Part 2. Canadian Institute of Mining bulletin, 1994, **87**, (977), 71-76.
- 4- Djingova, R. and J. Ivanova; "*Determination of rare earth elements in soils and sediments by inductively coupled plasma atomic emission spectrometry after cation-exchange separation*". Talanta, 2002, **57**, 821-829.
- 5- Saunders, N.; "*Uranium and the rare earth metals*". Heinemann Library: Chicago, USA, 2003, p. 125-250.
- 6- Kilbourn, B.T., A lanthanide lanthology; "*A collection of notes concerning the lanthanides and related elements*". Molycorp: White Plains, NY, U.S.A., 1993, p. 89.
- 7- Woodward, R.C.; "*Rare earths*". **98**: proceedings of the International Conference on Rare Earths, held in Fremantle, Western Australia, October 25-30, 1998. Trans Tech Publications: Switzerland, 1999, p. 608.
- 8- Bautista, R.G. and B. Mishra; "*Rare Earths and Actinides*". science, technology, and applications IV: proceedings of a symposium held during the 2000 TMS Annual Meeting. TMS: Nashville, USA, 2000, p. 163.

- 9- Jones, A.P., F. Wall, and C.T. Williams; "*Rare Earth minerals, chemistry, origin and ore deposits*". Chapman & Hall: London, UK, 1996, p. 123.
- 10-Gschneidner, K.A. and L. Eyring; "*Handbook on the physics and chemistry of rare earths*". Elsevier: Amsterdam, North-Holland, 1978, p. 232.
- 11-Gupta, C.K. and N. Krishnamurthy; "*Extractive metallurgy of rare earths*". International Materials Reviews, 1992, **37**, (5), 197- 248.
- 12-Spedding, F.H. and A.H. Daane; "*The Rare Earths*". John Wiley and Sons Inc.: New York, USA, 1961, p. 641.
- 13-Murthy, T.K.S. and T.K. Mukherjee; "*Rare Earths: occurrence, production, and applications*". Technology Information, Forecasting and Assessment Council & Indian Institute of Metals: New Delhi, India, 2002, p. 565.
- 14-Hedric, J.B; "*Rare Earths*". U.S.Gological Survey Minerals Year Book: 2004; pp. 1-12.
- 15-Cotton, F.A., G. Wilkinson, C.A. Murillo, and M. Bochmann; "*Advanced inorganic chemistry*". Wiley-Interscience: New York, USA, 1999, pp. 1108-1128.
- 16-Bautista, R.G. and M.M. Wong; "*Rare earths: extraction, preparation and applications: proceedings of a symposium on rare earths, extraction, preparation and applications*". TMS: Warrendale, USA, 1988, pp. 15-43.
- 17-Bashir, V.S.; "*Monazite, the Basic Raw Material for Rare Earths: Beneficiation from Beach Sands*". Materials Sc. Forum, 1988, **30**, 33.

- 18-Roskill; *"The Economics of Rare Earth and Yttrium"*. Information Services:London, 1991, p. 248.
- 19-Morasy, A.M., G.A. Dabbour, and E.F. Mohamed; *"Sedimentological and mineralogical studies on the coastal zone sediments, north Sinai"*. In Proc.2nd conf. Geol.Sinia, Development. Ismailia, Egypt, 1989, pp. 65-72.
- 20- Mohareb, R.S.; *"Evaluation of the heavy economic minerals in the sand bar sediment in the north-western part of El Manzala lake"*. Department of Gology, Faculty of Science. 2000, Ain Shams University: Egypt.
- 21-Dabbour, G.A., T.M. Labib, and A.F. Bakit; *"El Burulls sand dunes belt, a real black sand deposits"*. First Seminar on Nuclear Raw Materials and other technologies. Cairo, Egypt, 1999, pp. 48.
- 22-Abu Diab, A.A.; *"Sedimentological studies and economic evaluation of the coastal san dunes between El Geddia and Idku, Rosetta"*. Depatremment of Gology, Faculty of Science. 2002, El Mansoura University: Egypt.
- 23-Bakit, A.F.; *"Evaluation of economic placer deposits on the African Mediterranean coastal plain and their relation to drainge sources areas of the Nile River basin"*. Department of Natural Resources. 1997, Cairo University: Egypt.
- 24-Dabbour, G.A.; *"Estimation of the economic minerals reserve in Rosetta beach sands"*. Egypt. Mineral, 1995, **7**, 1-6.
- 25-Dabbour, G.A.; *"Nuclear and valuable materials in the Egyptian black sands"*. Proc. Inst. Conf. Energy for Continous Development Challenges in developing countries. Cairo, Egypt, 1995, pp. 56-62.
- 26-Mariano, A.N.; *"Economic Geology of the Rare Earth Elements"*. Rev. Mineral, 1989, **21**, 308.

- 27-Highley, D.E., D. Slater, and G.R. Chapman, *Trans. Inst. Min. Metall*, 1988, **97**, C34.
- 28-Zang , Z.B. and W.W. Cheng; "*Hydrometallurgy*". 1982, **9**, (2), 205-210.
- 29-Cotton, F.A., G. Wilkinson, and P.L. Gaus; "*Basic inorganic chemistry*". J. Wiley: New York, 1995, p. 615-623.
- 30-Sharpe, A.G.; "*Inorganic chemistry*". Longman Scientific & Technical ;Wiley: New York, 1992, p. 653-664.
- 31-Taylor, K.N. and M.I. Darby; "*Physics of Rare Earth Solids*". Chapman and Hall: London, 1972, p. 324.
- 32-Petzel, T. and O. Greis, *Z. Anorg. Allg. Chem.*, 1973, 396, 95.
- 33-Spedding, F.H. and B.J. Beaudry; "*The effect of impurities, particularly hydrogen, on the lattice parameters of the "ABAB" rare earth metals*". *J. Less Common Met.*, 1971, **25**, (1), 61-73.
- 34-Cotton, S.; "*Lanthanides and actinides*". Oxford University Press: New York, 1991, p. 22-64.
- 35-Van, J.H. and T. Vleck; "*The Theory of Electric and Magnetic Susceptibilities*". Oxford University Press: 1982, p. 395.
- 36-Rayner-Canham, G.; "*Descriptive inorganic chemistry*". W. H. Freeman: New York, 1999, pp. 456-475.
- 37-Harben, P.W.K., M; "*Industrial minerals, a global geology*". Industrial Minerals Information Ltd.: Surry, USA, 1996; pp 462.

- 38-Mustafa, M.; "*Separation of economic minerals and discovery of zinc, lead, and mercury minerals in the Egyptian black sands*". The Third International Conference on the Geology of Africa. Assuit, Egypt, 2003, pp. 153-171.
- 39-Hammoud, N.S.; "*Concentration of monazite from Egyptian black sand employing industrial techniques*". Department of Geology, Faculty of Science. 1966, Cairo University: Cairo, Egypt.
- 40-Hammoud, N.S.; "*Physical and chemical properties of some Egyptian beach economic minerals in relation to their concentration problems*". Department of Geology, Faculty of Science. 1973, Cairo University: Cairo, Egypt.
- 41-Hammoud, N.S. and A.A. Khazback; "*Beneficiation of Monazite, Zircon and Rutile from Egypt Beach Sands*". Arab. J. of N. Sciences and Applications., 1984, 220-229.
- 42-Gupta, B., P. Malik, and A. Deep; "*Extraction of uranium, thorium and lanthanides using Cyanex-923: Their separations and recovery from monazite*". Journal of Radio analytical and Nuclear Chemistry, 2002, **251**, (3), 451-456.
- 43-Miao, Y. W. and J.S. Horng; "*Decomposition of Taiwan local black monazite by hydrothermal and soda fusion methods*". Rare earth conference: extraction preparation and applications meeting. New Delhi, 1989, pp. 195-206.
- 44-Hughes, K.C., P.B. Linkson, and D.C. White; "*The processing of monazite*". Australasian chemical engineering conference. Australia, 1989, **17**, pp. 112-119.
- 45-Mackey, T.S.; "*Advance in Mineral Processing*". Wiely Interscience: New York, 1986, p. 534.
- 46-Hrish, M., N. Bacon, and A. Ucas; "*Method for the separation of rare earths*". US Patent, 2722471, 1955.

- 47-Abdel-Rehim, A.M.; "An innovative method for processing Egyptian monazite". Hydrometallurgy, 2002, **67**, (1-3), 9-17.
- 48-Murthy T. K and Gupta C. K.; "Rare earth resources, their extraction and applications". Science and Technology of Rare Earth Materials. Academic Press: New York, 1980, pp. 23.
- 49-Murthy, T.K.S.; "Processes for the production of rare earths from monazite". Int. Conf. Adv. Chem. Metall. Bombay, India, 1979, pp. 36.
- 50-Narayanan, N.S., S. Thulasidoss, T.V. Ramachandran, T.V. Swaminathan, and K.R. Prasad; "Processing of monazite at the rare earth division, Udyogamandal". Materials-Science-Forum-Switzerland, 1988, **30**, 45-56.
- 51-Kirth-Othmer; "Encyclopedia of Chemical Technology". New York, 1972, p. 871-899.
- 52-United States. Bureau of Mines.; "Rare earths". 1992, The Bureau: Washington, DC.
- 53-Tran, T., Report 1/1990. Dept. of Mineral Processing and Extractive Metallurgy: New York, 1990, p. 1-22.
- 54-Saleh, F.A.; "Recovery of thorium, uranium and rare earths from Egyptian monazite sands". Internal Report 3; U.A.R.A.E.E/Int.-Rep.-3: Egypt, Cairo, 1966; pp 45.
- 55-Gupta, C.K., H. Singh, S.L. Mishra, and R. Vijayalakshmi; "Processing of xenotime concentrate by sulphuric acid digestion and selective thorium precipitation of rare earths". Hydrometallurgy, 2001, **61**, 75-80.
- 56-Alex, P., A.K. Suri, and C.K. Gupta; "Processing of xenotime concentrate". Hydrometallurgy, 1998, **50**, 331.

- 57-Rossmannith, K.; "*Separation of cerium earths from large quantities of mixtures with yttrium earths by fractional crystallisation of magnesium double nitrates*". Monatsh Chem, 1994, **125**, (5), 479-484.

- 58- El-Said, N., and N.A.R., Emad H. Borai; "*Modification in Purex process using supported liquid membrane separation of cerium(III) via oxidation to cerium(IV) from fission products from nitrate medium by SLM*". Journal of Membrane Science, 2002, **198**, 23–31.

- 59-Nevin Oztekin and F.B. Erim; "*Separation and direct UV detection of lanthanides complexed with pyridine-2-carboxylic acid by capillary electrophoresis*". J. Chrom (A),, 2001, **924**, 541-546.

- 60-Rabie, K.A. and M.M. Ali; "*Recovery of highly pure rare earth products from Egyptian beach monazite by selective dissolution*". 4th Intern. Conf. Geochemistry. 1999. Alex. Univ., Egypt.

- 61-Kilbourn, B.T.; "*Cerium : A Guide to its Role in Chemical Technology*". Molycorp, Inc. Mountain Pass, CA U.S.A.: 1995, p. 90.

- 62-Eyring, L.; "*Progress in the science and technology of the rare earths*". Pergamon Press.: Oxford, New York,, 1968, p. 30-61.

- 63-Rabie, K.A.; "*Studies on The Separation of some Rare Earth Elements from Egyptian Monazite Sand*". Chemistry Dept;. 1996, Cairo University, Faculty of Science, Egypt: Cairo.

- 64-Rabie, K.A., Ali. M.M., S. El- Alfy, Zayed. M.A., N.T. El-Hazek, and A. H. Fathe; "*Separation of Cerium(III) from Egyptian Monazite by oxidation to cerium (IV)*". Third Conf. on Peaceful uses of Atomic Energy, Damascus,, 1996, pp. 355-360.

- 65-Onstott, E.I.; "*Separation of the lanthanons at amalgam cathodes. II. The separation of samarium from gadolinium and purification of europium at lithium amalgam cathode*". J. Amer. Chem. Soc., 1956, **78**, 2070-2076.

- 66-Onstott, E.I.; *"The separation of europium from samarium by electrolysis"*. J. Amer. Chem. Soc., 1955, **77**, 2129-2132.
- 67-Onstott, E.I.; *"Separation of the lanthanons at amalgam cathodes. III. Electrochemical fractionation of the lanthanons at a lithium amalgam cathode"*. J. Amer. Chem. Soc., 1959, **81**, 4451-4465.
- 68-Sisson, D.H., V. A. Mode, and D. O. Campbell, J. Chrom., 1972, **66**, 129.
- 69-Haizhou, W., N. Watanabe, Y. Gohshi, and R. Kotama.; *"Mixture of HIBA and glycolic acid as eluent for effective separation of yttrium and dysprosium by HPLC"*. Fresenius J Anal Chem, 1999, **363**, 424-426.
- 70-Campbell, D.O.; *"Rapid rare earth separation by pressurized ion exchange chromatography"*. J. Inorg. Nucl. Chem., 1973, **35**, 3911-3919.
- 71-Girard, J.E.; *"Ion chromatography with coulometric detection for the determination of inorganic ions"*. Anal. Chem., 1979, **51**, (7), 836-839.
- 72-Yoshida, K. and Haraguchi, H.; *"Determination of rare earth elements by liquid chromatography/inductively coupled plasma atomic emission"*. Anal. Chem., 1984, **56**, (13), 2580-2585.
- 73-Schoebrechts, F., Merciny, E., and Duyckaerts, G.; J. Chrom., 1979, 174, 351.
- 74-Aycicek, A., and Kutun, S.; *"Separation and determination of various elements by cation exchange chromatography with sodium trimethylphosphate as the eluent"*. J. Chrom. (A), 1999, **847**, 245-250.

- 75-Elchuk, S. and Cassidy, R. M.; "Separation of the lanthanides on high-efficiency bonded phases and conventional ion-exchange resins". Anal. Chem., 1979, **51**, (9), 1434.
- 76-Sivaraman, N., Kumar, R., Subramaniam, S., and Rao, P. R. V.; "Separation of lanthanides using ion-interaction chromatography with HDEHP coated columns". J. Rad. Nucl. Chem., 2002, **252**, (3), 491-495.
- 77- Hubicki, Z., and Olszak, M.; "Studies on separation of rare earth elements on various types of anion-exchangers in the $C_3H_7OH-7M HNO_3$ systems". J. Chrom. (A), 2002, **955**, 257-262.
- 78-Sana, K. S., and Akseli, A.; "Separation and determination of rare earth elements by Dowex 2-X8 resin using sodium trimethylphosphate as elution agent". J. Chrom. (A), 2000, **874**, 311-317.
- 79-Halina, H., and Kolodynska, D.; "Separation of $Y(dcta)$ - complexes from $Nd(dcta)$, and $Sm(dcta)$, complexes on polyacrylate anion-exchangers". J.Serb.Shem.Soc., 2003, **68**, (3), 183-190.
- 80-Dukov, I.L. and Jordanov, V. M.; "High Molecular Weight Amines as Synergistic Agents in the Solvent Extraction of Lanthanides with Thenoyltrifluoroacetone". Monatsh Chem, 1999, **130**, 865-871.
- 81-Saeed M, Ahmad M, Ali A, and C. Mohammed; Radiochim Acta, 1992, **57**, 125.
- 82-Dukov, I. and Misheva, M.; Monatsh Chem, 1995, **126**, 1187.
- 83-Sherrington, L.; "Commercial Processes for Rare Earths and Thorium. Handbook of Solvent Extraction. Wiley Interscience: New York, 1983, pp. 719.

- 84- Bandyopadhyay, A., and U.S. Roy, J. Indian Chem. Soc., 1998, **75**, (6), 413.
- 85-Fedorov, Y.S., I. S. Denniss, I. May, and N. J. Hill, Solvent Extr. Ion Exch., 1999, **17**, 243.
- 86-Mathur, J.N. and G. R. Choppin, Solvent Extr. Ion Exch., 1998, **16**, 459.
- 87-Ramebaeck, H. and M. Skalberg, J. Radioanal. Nucl. Chem., 1998, 235, 229.
- 88-Shabana, R. and H. Ruf, J. Radioanal. Chem., 1977, **36**, 387.
- 89-Yang, Y.H., S. X. Sun, S.Y. Xue, Y. Z. Yang, and B. R. Bao, J. Radioanal. Nucl. Chem., 1998, **273**, 171.
- 90-Mathur, J.N. and G. R. Choppin, Solvent Extr. Ion Exch., 1998, **16**, 739.
- 91-Kandil, A.T. and K.S. Farah; "*Solvent-H₂O Mutual Solubility Effects in the Synergistic Extraction of Ce³⁺*". Radiochim. Acta., 1981, **29**, 149.
- 92-Mishra, S.L., H. Singh, and C.K. Gupta; "*Simultaneous purification of dysprosium and terbium from dysprosium concentrate using 2-ethyl hexyl phosphonic acid mono-2-ethyl hexyl ester as an extractant*". Hydrometallurgy, 2000, **56**, (1), 33-40.
- 93-Ahmed A. A., S. Nii, F. Kawaizumi, and K. Takahashi; "*Separation of La and Ce with PC-88A by counter-current mixer-ttlerse extraction column*". Separation and Purification Technology, 2002, **26**, 265-272.
- 94-Jain A., Singh O. V., and Tandon S. N.; "*Extraction of lanthanoids and some associated elements by mono-(2-ethylhexyl) phosphoric acid and their separations*". J. Radioanal. Nucl. Chem., 1991, **147**, (2), 355.

- 95-Mason G. W., McCarty S., and P.D. Farah.; "*Synergistic effects in the extraction of selected metallic cations by mono(2-ethylhexyl)phosphoric acid*",. J. Inorg. Nucl. Chem., 1962, **14**, 967.
- 96-Reddy, M.L.P., J.R. Bosco Bharathi, Smitha Peter, and T.R. Ramamohan; "*Synergistic extraction of rare earths with bis(2,4,4-trimethyl pentyl) dithiophosphinic acid and trialkyl phosphine oxide*". Talanta, 1999, **50**, 79-85.
- 97-Reddy, M.L.P., T.R. Ramamohan, R. L. Varma, S. K. Sahu, and V. Chakravorty, Solvent Extr. Ion Exch., 1998, **16**, 795.
- 98-Jun, L., W. Zhenggui, L. Deqian, M. Gengxiang, and J. Zucheng, Hydrometallurgy, 1998, **50**, 77.
- 99-K., G.C.; "*Solvent Extraction and Separation of Tervalent Lanthanides and Yttrium Using Cyanex 923*". Solvent Extr. Ion Exch., 2003.
- 100- Muhammad, I. S., and B. Saad; "*Solvent extraction of lanthanum (III) from acidic nitrate-acetato medium by Cyanex 272 in toluene*". Hydrometallurgy, 2002, **63**, 75-84.
- 101- Li, K. and H. Freiser, Solvent Extr. Ion Exch., 1986, **4**, (4), 339.
- 102- Komatsu, Y. and H. Freiser, Anal. Chim. Acta., 1989, **227**, (2), 256.
- 103- Komatsu, Y. and H. Freiser, Anal. Chim. Acta., 1989, **227**, (2), 344.
- 104- Li, K. and H. Freiser, Solvent Extr. Ion Exch., 1986, **4**, (4), 339.

- 105- Ritcey, G.M. and A.W. Ashbrook; *"Solvent Extraction"*. Part II. Elsevier: Amsterdam, Netherlands, 1979, p. 413.
- 106- Alstad, J., L.H. Augustson, and L. Farbu; *"Solvent extraction of rare-earth metal ions with thenoyltrifluoroacetone in carbon tetrachloride"*. J. Inorg. Nucl. Chem., 1974, **36**, 899–903.
- 107- Noro, J. and T. Sekine; *"Effect of several quaternary ammoniums on the solvent extraction of europium (III) 2-thenoyltrifluoroacetate anionic complex into chloroform"*. Bull. Chem. Soc.Jpn., 1993, **66**, 804-809.
- 108- Dukov, I.L., M. Atanassova, and V.M. Jordanov; *"Effect of the quaternary ammonium salt Aliquat 336 on the solvent extraction of lanthanoid (III) ions with thenoyltrifluoroacetone"*. Hydrometallurgy, 2002, **63**, 41-47.
- 109- Rabie, K.A.; *"Evaluation of Yttrium content in Egyptian beach monazite mineral after its separation by solvent extraction method"*. First Seminar on Nuclear Raw Materials and their Technology. Cairo, Egypt, 1990, pp. 45-52.
- 110- Rabie, K.A., Ali. M.M., M.A. Zayed, N.T. El-Hazek, and H.F. Aly; *"Separation of Praseodymium from Egyptian Monazite by solvent Extraction method using D2EHPA/K Extractant"*. Proceeding of the second international scientific conference (science, Development and Environment). Al-Azhar University, Faculty of Science, Cairo, Egypt, 1997, 7-20 March, pp. 77-88.
- 111- Rabie, K.A., Ali. M.M., M.A. Zayed, N.T. El-Hazek, and H.F. Aly; *"Separation of Lanthanum from Egyptian Monazite by solvent Extraction method using D2EHPA/K Extractant"*. Egypt. J. Anal. Chem, 1998, **7**, 89-101.
- 112- Rabie, K.A., Ali. M.M., M.A. Zayed, N.T. El-Hazek, and H.F. Aly; *"Separation of Neodymium from Egyptian Monazite by solvent Extraction Technique using D2EHPA/K solvent"*. Al-Azhar Bull. Sci., 1998, **9**, (2), 101-115.

- 113- Yoshida, M., K. Uezu, M. Goto, and S. Furusaki;; "*Metal Ion Imprinted Microsphere Prepared by Surface Molecular Imprinting Technique Using Water-in-Oil-in-Water Emulsions*". J. Appl. Polym. Sci., 1999, **73**, 1223-1230.
- 114- Yoshida, M., K. Uezu, F. Nakashio, and M. Goto;; "*Spacer Effect of Novel Bifunctional Organophosphorus Monomers in Metal- Imprinted Polymers Prepared by Surface Template Polymerization*". J. Polym. Sci., A,, 1998, **36**, 2727-2734.
- 115- Araki, K., M. Yoshida, K. Uezu, M. Goto, and S. Furusaki; "*Lanthanide-Imprinted Resins Prepared by Surface Template Polymerization*". J. Chem. Eng. Japan,, 2000, **33**, 665-668.
- 116- Wakui, Y., H. Matsunaga, and T.M. Suzuki; "*Distribution of Rare Earth Elements between (2-Ethylhexyl Hydrogen 2-Ethylhexylphosphonate)-Impregnated Resin and Acid Aqueous Solution*". Anal. Sci., 1988, **4**, 325-327.
- 117- Shibata, J., S. Matsumoto, N. Nakayama, M. Mashimo, and H. Yamamoto; "*Separation of Dy, Y, Tm and Yb from Heavier Rare Earth Residue by Column Method Using Solvent Impregnated Resin— Separation of Rare Earth with Solvent Impregnated Resin (3rd Report)*". Shigen-to-Sozai,, 1996, **112**, 873-878.
- 118- Shibata, J., T. Nagasaka, and M. Mashimo; "*Separation of Nd and Sm by Column Method—Separation of Rare Earths with Solvent Impregnated Resin (1st Report)*". Shigen-to-Sozai, 1994, **110**, 191-194.
- 119- Hirai, T., N. Syouhei, N. Sakaguchi, and I. Komasaawax; "*Extraction and separation of rare earth metals using microcapsules containing bis(2-ethylhexyl)phosphinic acid*". Hydrometallurgy, 2002, **64**, 35-42.
- 120- Gupta, C. K., and Krishnamurthy, N.; " *Extractive metallurgy of rare earths*". International Materials Reviews, 1992, **37**, (5), 204-216.

- 121- Haskin, L. A., and T. P. Paster: "*Handbook on the physics and Chemistry of rare earth*". Vol.3,(ed. K. A. Gschneidner, Jr and L. Eyring) 1-80, Amsterdam, North-Holland, 1979.
- 122- Robjohns, N.,Min. Ann. Rev., **91**, 1986.
- 123- Gschneidner, K. A., Jr and A. H. Daane, Ref. 24, vol. **11**, 409-484, 1981.
- 124- Smart, J. V.; "*Rare Earth*". Mineral Information Leaflet No **2**, 1999, 1-4.
- 125- Hedric, J. B.; "*Rare Earth Elements*". U. S. Geological Survey, Minerals Commodity Summaries: 2005, p.28.
- 126- Hedric, J. B.; "*Rare Earth Elements- Critical Resources for high Technology*". U. S. Geological Survey Fact Sheet 087-02: 2002, pp. 25.
- 127- Banks, C.V. and D.W. Klingman; "*Spectrophotometric determination of rare earth mixtures*". Analytical Chimica Acta, 1956, **15**, 356-363.
- 128- Xiaoli, W.; "*Resin Phase-Spectrophotometric Determination of Trace Rare Earth Elements in Iron Ores with Trichlorophosphonazo*". Chinese Journal of Analytical Chemistry, 2002, **30**, (4), 506.
- 129- Arrebola, A., M.G. Bagur, M. Sanchez-Viñas, D. Gazquez, R. Romero, and M. Camino; "*Indirect determination of total yttrium and lanthanides by flame atomic absorption measurement of magnesium after extraction of their ternary complexes with purpurin (1,2,4-trihydroxyanthraquinone) and magnesium into isobutyl methyl ketone*". J. Analytical Atomic Spectrometry, 1998, **13**, (8), 765-768.
- 130- Pedreira, W.R., J.E.S. Sarkis, C.A. da Silva Queiroz, C. Rodrigues, I.A. Tomiyoshi, and A. Abrao; "*Determination of trace amounts of rare-*

- earth elements in highly pure neodymium oxide by sector field inductively coupled plasma mass spectrometry (ICP-SFMS) and high-performance liquid chromatography (HPLC) techniques". *J. Solid State Chemistry*, 2003, **171**, (1/2), 3-6.
- 131- Wanjau, R., H. Bin, J. Zucheng, Q. Yongchao, H. Man, and L. Pei; "Determination of Trace Metal Impurities in Cerium Oxide by Fluorination-Assisted ETV-ICP-AES after HPLC Separation". *J. Rare Earths*, 2004, **22**, (2), 197-200.
- 132- Pedreira, W.R., J.E. Sarkis, C. Rodrigues, I.A. Tomiyoshi, C.A. da Silva Queiroz, and A. Abrao; "Determination of trace amounts of rare earth elements in high pure lanthanum oxide by sector field inductively coupled plasma mass spectrometry (HR ICP-MS) and high-performance liquid chromatography (HPLC) techniques". *J. Alloys and Compounds*, 2002, **344**, (1-2), 17-20.
- 133- Pedreira, W.R., J.E.S. Sarkis, C. Rodrigues, I.A. Tomiyoshi, C.A. da Silva Queiroz, and A. Abrao; "Determination of trace amounts of rare earth elements in highly pure praseodymium oxide by double focusing inductively coupled plasma mass spectrometry and high-performance liquid chromatography". *J. Alloys and Compounds*, 2001, **323-324**, 49-52.
- 134- Igarashi, K., T. Akagi, F.F. Fu, and S. Yabuki; "Determination of rare-earth elements in a limestone geological standard reference material by ICP MS following solvent extraction". *Analytical Sciences*, 2003, **19**, (3), 441-445.
- 135- Pin, C. and S. Joannon; "Combined cation-exchange and extraction chromatography for the concomitant separation of Zr, Hf, Th, and the Lanthanides from geological materials". *Talanta*, 2002, **57**, (2), 393-403.
- 136- De Vito, I.E., R.A. Olsina, and A.N. Masi; "Preconcentration and elimination of matrix effects in XRF determinations of rare earth elements by preparing a thin film through chemofiltration". *J. Analytical Atomic Spectrometry*, 2001, **16**, (3), 275-278.

- 137- Nakai, I., Y. Terada, M. Itou, and Y. Sakurai; "*Use of highly energetic (116 keV) synchrotron radiation for X-ray fluorescence analysis of trace rare-earth and heavy elements*". *J. Synchrotron Radiation*, 2001, **8**, (4), 1078-1081.
- 138- Zhang, Q.s. and Y.f. Chang; "*Choice of excitation source for determination of rare earth elements with radioisotope excited X ray fluorescence*". *Nuclear Electronics and Detection Technology*, 2000, **20**, (2), 92-95.
- 139- Minowa, H. and M. Ebihara; "*Separation of rare earth elements from scandium by extraction chromatography*". (Application to radiochemical neutron activation analysis for trace rare-earth elements in geological samples). *Analytica Chimica Acta*, 2003, **498**, (1-2), 25-37.
- 140- Ozaki, T., S. Enomoto, Y. Minai, S. Ambe, F. Ambe, and T. Tominaga; "*Determination of lanthanides and other trace elements in ferns by instrumental neutron activation analysis*". *J. Radioanalytical and Nuclear Chemistry*, 1997, **217**, (1), 117-124.
- 141- Lyle, S.J. and N.A. Za'tar; "*A selective spectrophotometric determination of europium in mixtures with other lanthanides, yttrium and scandium*". *Analytica Chimica Acta*, 1960, **135**, (2), 327-332.
- 142- Yamada, S., F. Miyoshi, K. Kano, and T. Ogawa; "*Highly sensitive laser fluorimetry of europium(III) with 1,1,1-trifluoro-4-(2-thienyl)-2,4-butanedione*". *Analytica Chimica Acta*, 1981, **127**, 195-198.
- 143- Yamada, S., K. Kano, and T. Ogawa; "*Time discrimination in the laser fluorimetry and ultratrace determination of europium(III) and samarium(III) with 4,4,4-trifluoro-1-(2-thienyl)-1,3-butanedione*". *Analytica Chimica Acta*, 1982, **134**, 21-29.
- 144- Marczenko, Z.; "*Rare earths. In Spectrophotometric determination of Elements*". Jon Wiley and Sons Inc.: New York, 1986, pp. 442-443.

- 145- Onstott, E.I.; *"Separation of rare earths by electrolysis with porous carbon electrodes"*. In *7th Rare Earth Research Conf.* 1968, pp. 751-757.
- 146- Habashi, F.; *"Principles of Extractive Metallurgy"*, vol. **2**, Hydrometallurgy, part two, Treatment of leach solutions, Laval University, Quebec city, Canada, 1993, pp177-181.
- 147- Lotfi, A. I; *"Separation of Pure Neodymium From Rare Earth Concentrate Produced By Sulfuric Acid Processing of Egyptian Black Sand Monazite"* ,Zagazig.Univ.,Egypt.2008.