

## DAFTAR PUSATAKA

Alonso, E., Sherman, A. M., Wallington, T. J., Everson, M. P., Field, F. R., Roth, R., and Kirchain, R. E. (2012): Evaluating Rare Earth Element Availability: A Case with Revolutionary Demand from Clean Technologies.

Anonim (2002): Standard Practice for Proximate Analysis of Coal and Coke, ASTM, USA.

Anonim (2016): Indonesia Electricity Development Plan and Indonesia Coal-Ash Management Implementation, *International Coal Based Power Conference*, New Delhi, retrieved from internet: [www.gatrik.esdm.go.id](http://www.gatrik.esdm.go.id), 4–8.

Behera, S. S., and Parhi, P. K. (2016): Leaching kinetics study of neodymium from the scrap magnet using acetic acid, *Separation and Purification Technology*, 160, 59–66. <https://doi.org/10.1016/j.seppur.2016.01.014>

Belardi, G., Ippolito, N., Piga, L., and Serracino, M. (2014): Thermochemica Acta Investigation on the status of rare earth elements contained in the powder of spent fluorescent lamps, *Thermochemica Acta*, 591, 22–30. <https://doi.org/10.1016/j.tca.2014.07.015>

Belkin, H. E., Tewalt, S. J., Hower, J. C., Stucker, J. D., and Keefe, J. M. K. O. (2009): International Journal of Coal Geology Geochemistry and petrology of selected coal samples from Sumatra , Kalimantan , Sulawesi , and Papua , Indonesia, *International Journal of Coal Geology*, 77(3–4), 260–268. <https://doi.org/10.1016/j.coal.2008.08.001>

Blissett, R. S., Smalley, N., and Rowson, N. A. (2014): An investigation into six coal fly ashes from the United Kingdom and Poland to evaluate rare earth element content, *FUEL*, 119, 236–239. <https://doi.org/10.1016/j.fuel.2013.11.053>

Blissett, R. S., Smalley, N., Rowson, N. A., and Rey (2017): An investigation into six coal fly ashes from the United Kingdom and Poland to evaluate rare earth

element content, *FUEL*, 119, 236–239.  
<https://doi.org/10.1016/j.fuel.2013.11.053>

Borra, C. R., Pontikes, Y., Binnemans, K., and Gerven, T. Van (2015): Leaching of rare earths from bauxite residue ( red mud ), *Minerals Engineering*, 76, 20–27. <https://doi.org/10.1016/j.mineng.2015.01.005>

Davison, R. L., Natusch, D. F. S., and Wallace, J. R. (1974): Trace Elements in Fly Ash Dependence of Concentration on Particle Size, 8(13).

Edi, S. (2017): *Handbook of Energy and Economic Statistic of Indonesia*, Ministry of Energy and Mineral Resources Republic of Indonesia, Jakarta, 62.

Feng, X. L., Long, Z. Q., Cui, D. L., Wang, L. S., Huang, X. W., and Zhang, G. C. (2013): Kinetics of rare earth leaching from roasted ore of bastnaesite with sulfuric acid, *Transactions of Nonferrous Metals Society of China (English Edition)*, 23(3), 849–854. [https://doi.org/10.1016/S1003-6326\(13\)62538-8](https://doi.org/10.1016/S1003-6326(13)62538-8)

Ferian, A., Ayu, B. D. A., Widya, R., and Murti., P. H. B. T. (2018): The Composition and mode of occurrence of rare earth elements and yttrium in fly ash and bottom ash from coal-fired plants in Java, Indoneisa, *The Society for Oorganic Petrology Annual Meeting*.

Fessenden, and Fessenden (1986): *Organic Chemistry (Third Edit)*, Wadsworth, Inc, Massachusset.

Finkelman, R. B., Palmer, C. A., and Wang, P. (2018): International Journal of Coal Geology Quantification of the modes of occurrence of 42 elements in coal, *International Journal of Coal Geology*, 185(September 2017), 138–160. <https://doi.org/10.1016/j.coal.2017.09.005>

Fogler, H. S. (2005): *Elements of Chemical Reaction Engineering (Fourth Edi)* (A. Andreas, D. John, Ha. J. Thomas, and S. L. E, Eds.), Prentice Hall Proffessional TEchnical Reference, Michigan United States America.

Galbreath, K. C., Toman, D. L., Zygarlicke, C. J., and Pavlish, J. H. (2000): Trace

Element Partitioning and Transformations During Combustion of Bituminous and Subbituminous U . S . Coals In a 7-kW Combustion System, *Energy & Fuels*, 1(9), 1265–1279.

Golev, A., Scott, M., Erskine, P. D., Ali, S. H., and Ballantyne, G. R. (2014): Rare earths supply chains : Current status , constraints and opportunities, *Resources Policy*, 41, 52–59. <https://doi.org/10.1016/j.resourpol.2014.03.004>

Handoyo, H. (2019): *Kinetika Pelindian Logam Tanah Jarang (LTJ) Dalam Abu Terbang Batubara Menggunakan Asam Asetat Sebagai Pelindi*, Unoversitas Gadjah Mada.

Hartman, P., and Chan, H. K. (1993): Application of the Periodic Bond Chain (PBC) Theory and Attachment Energy Consideration to Derive the Crystal Morphology of Hexamethylmelamine, *Pharmaceutical Research: An Official Journal of the American Association of Pharmaceutical Scientists*, 10(7), 1052–1058. <https://doi.org/10.1023/A:1018927109487>

Henderson, P. (1984): *Rare Earth Geochemistry*, Elsevier Ltd, London, U.K.

Huang, Y., Dou, Z., Zhang, T., and Liu, J. (2017): Hydrometallurgy Leaching kinetics of rare earth elements and fl uoride from mixed rare earth concentrate after roasting with calcium hydroxide and sodium hydroxide, *Hydrometallurgy*, 173(June), 15–21. <https://doi.org/10.1016/j.hydromet.2017.07.004>

Jorjani, E., and Shahbazi, M. (2016): The production of rare earth elements group via tributyl phosphate extraction and precipitation stripping using oxalic acid, *Arabian Journal of Chemistry*, 9, S1532–S1539. <https://doi.org/10.1016/j.arabjc.2012.04.002>

Jun, T., Jingqun, Y., Ruan, C., Guohua, R., Mintao, J., and Kexian, O. (2010): Hydrometallurgy Kinetics on leaching rare earth from the weathered crust elution-deposited rare earth ores with ammonium sulfate solution, *Hydrometallurgy*, 101(3–4), 166–170.

<https://doi.org/10.1016/j.hydromet.2010.01.001>

Kashiwakura, S., Kumagai, Y., Kubo, H., and Wagatsuma, K. (2013): Dissolution of Rare Earth Elements from Coal Fly Ash Particles in a Dilute H<sub>2</sub>SO<sub>4</sub> Solvent, 2013(May), 69–75.

Khawassek, Y. M., Eliwa, A. A., Gawad, E. A., and Abdo, S. M. (2015): ScienceDirect Recovery of rare earth elements from El-Sela effluent solutions, *Journal of Radiation Research and Applied Sciences*, 8(4), 583–589.  
<https://doi.org/10.1016/j.jrras.2015.07.002>

Kim, C., Yoon, H., Woo, K., Lee, J., Kim, S., Myung, S., Lee, S., Joe, A., Lee, S., Yoo, S., and Kim, S. (2014): Hydrometallurgy Leaching kinetics of lanthanum in sulfuric acid from rare earth element ( REE ) slag, *Hydrometallurgy*, 146, 133–137. <https://doi.org/10.1016/j.hydromet.2014.04.003>

Kutchko, B. G., and Kim, A. G. (2006a): Fly ash characterization by SEM – EDS, 85, 2537–2544. <https://doi.org/10.1016/j.fuel.2006.05.016>

Kutchko, B. G., and Kim, A. G. (2006b): Fly ash characterization by SEM – EDS, *FUEL*, 85, 2537–2544. <https://doi.org/10.1016/j.fuel.2006.05.016>

Lazo, Daniel E, Dyer, L. G., Alorro, R. D., and Browner, R. (2017): Hydrometallurgy Treatment of monazite by organic acids I: Solution conversion of rare earths, *Hydrometallurgy*, 174(October), 202–209.  
<https://doi.org/10.1016/j.hydromet.2017.10.003>

Lazo, Deaniel Eduardo, Dyer, L. G., and Alorro, R. D. (2017): Minerals Engineering Silicate, phosphate and carbonate mineral dissolution behaviour in the presence of organic acids: A review, *Mineral Engineering*, 100, 115–123. <https://doi.org/https://doi.org/10.1016/j.mineng.2016.10.013>

Levenspiel, O. (1999): *Chemical Reaction Engineering*, John Wiley & Sons, United States of America, 570.

Major, T. (1996): *Genesis and The Origin of Coal and Oil* (2nd Edition, Ed.),

Apologetics Press, Inc., USA.

McGili, Ian (Jhonson Matthey Technology Centre, E. (2012): Rare Earth Elements,  
*Ullmann's Encyclopedia of Industrial Chemistry*.

<https://doi.org/10.1002/14356007.a22>

Moldoveanu, G. A., and Papangelakis, V. G. (2012): Hydrometallurgy Recovery of  
rare earth elements adsorbed on clay minerals : I . Desorption mechanism,  
*Hydrometallurgy*, 117–118, 71–78.

<https://doi.org/10.1016/j.hydromet.2012.02.007>

Morrison, W. M., and Tang, R. (2012): China ' s Rare Earth Industry and Export  
Regime : Economic and Trade Implications for the United States.

Nagaiyar, K., and Gupta, C. K. (2016a): *Extractive Metallurgy of Rare Earth*  
(Second Edi), Taylor & Francis Group, London, New York, retrieved from  
internet: <http://www.taylorandfrancis.com>.

Nagaiyar, K., and Gupta, C. K. (2016b): *Extractive Metallurgy of Rare Earth*  
(Second Edi), CRC Press Taylor & Francis Group Boca Raton London New  
York, retrieved from internet: [www.copyright.com](http://www.copyright.com), 37.

Nie, H., Wang, Y., Wang, Y., Zhao, Z., Dong, Y., and Sun, X. (2017): Recovery of  
scandium from leaching solutions of tungsten residue using solvent extraction  
with Cyanex 572, *Hydrometallurgy*.  
<https://doi.org/10.1016/j.hydromet.2017.10.026>

Panda, R., Kumari, A., Kumar, M., Hait, J., Kumar, V., Kumar, J. R., and Young,  
J. (2014): Journal of Industrial and Engineering Chemistry Leaching of rare  
earth metals ( REMs ) from Korean monazite concentrate, *Journal of  
Industrial and Engineering Chemistry*, 20(4), 2035–2042.  
<https://doi.org/10.1016/j.jiec.2013.09.028>

Peramaki, S. (2014): *Method Development for Determination and Recovery of Rare  
Earth Elements from Industrial Fly Ash*.

Peremaki, S. (2014): *Method Development for Determination and Recovery of Rare Earth Elements from Industrial Flys Ash*, University of Jyvaskyla, Jyvaskyla, Findland, 60.

Peter H, Staufer, and James (2002): Rare Earth Elements Critical Resources for High Technology, *U.S. Geological Survey Science for a Changing World*, retrieved from internet: <https://pubs.usgs.gov/fs/2002/fs087-02/>.

Pietrelli, L., Bellomo, B., Fontana, D., and Montereali, M. R. (2002): Rare earths recovery from NiMH spent batteries, 66, 135–139.

Prameswara, G. (2019): *Ekstraksi Logam Tanah Jarang dan Logam Berharga Hasil Fusi Alkali Tailing Zirkon*, Universitas Gadjah Mada.

Qu, Y., and Lian, B. (2013): Biore source Tec hnology Bioleaching of rare earth and radioactive elements from red mud using *Penicillium tricolor* RM-10, *Bioresource Technology*, 136, 16–23. <https://doi.org/10.1016/j.biortech.2013.03.070>

Rais, C. J. D. and E. A. (2009): Proximate analysis of coal, *Journal of Chemical Education*, retrieved from internet: [www.JCE.DivCHED.org](http://www.JCE.DivCHED.org), 86, 222–224.

Reddy, B. R., and Kumar, J. R. (2016): Rare Earths Extraction , Separation , and Recovery from Phosphoric Acid Media, 6299(May). <https://doi.org/10.1080/07366299.2016.1169144>

Reed, D. W., Fujita, Y., Daubaras, D. L., Jiao, Y., and Thompson, V. S. (2016): Hydrometallurgy Bioleaching of rare earth elements from waste phosphors and cracking catalysts, *Hydrometallurgy*, 166, 34–40. <https://doi.org/10.1016/j.hydromet.2016.08.006>

Roth, E., Macala, M., Lin, R., Bank, T., Howard, B., Soong, Y., and Granite, E. (2017): Distributions and Extraction of Rare Earth Elements from Coal and Coal By-Products, *2017 World of Coal Ash (WOCA) Conference in Lexington*, retrieved from internet: <http://www.flyash.info/>.

Sadri, F., Rashchi, F., and Amini, A. (2017): International Journal of Mineral Processing Hydrometallurgical digestion and leaching of Iranian monazite concentrate containing rare earth elements Th , Ce , La and Nd, *International Journal of Mineral Processing*, 159, 7–15.  
<https://doi.org/10.1016/j.minpro.2016.12.003>

Scott, R. A. (2012): *The Rare Earth Elements Fundmentals and Applications* (U. Atwood, David A.(University of Kentucky, Lexington, KY, Ed.), John Wiley & Sons Ltd, USA.

Seredin, V V (2010a): A New Method for Primary Evaluation of the Outlook for Rare Earth Element Ores, 52(5), 475–480.  
<https://doi.org/10.1134/S1075701510050077>

Seredin, V V (2010b): A New Method for Primary Evaluation of the Outlook for Rare Earth Element Ores, *Geology of Ore Deposits*, 52(5), 5–6.  
<https://doi.org/10.1134/S1075701510050077>

Seredin, Vladimir V, and Dai, S. (2012): International Journal of Coal Geology Coal deposits as potential alternative sources for lanthanides and yttrium, *International Journal of Coal Geology*, 94, 67–93.  
<https://doi.org/10.1016/j.coal.2011.11.001>

Setiawan, H., Petrus, H. T. B. M., and Perdana, I. (2019): Reaction kinetics modeling for lithium and cobalt recovery from spent lithium-ion batteries using acetic acid, *International Journal of Minerals, Metallurgy and Materials*, 26(1), 98–107. <https://doi.org/10.1007/s12613-019-1713-0>

Simoni, M., Kuhn, E. P., Morf, L. S., Kuendig, R., and Adam, F. (2015): Urban mining as a contribution to the resource strategy of the Canton of Zurich, *Waste Management*, 45, 10–21.  
<https://doi.org/10.1016/j.wasman.2015.06.045>

Teichmuller, M. (1989): The genesis of coal from the viewpoint of coal petrology, *International Journal of Coal Geology, Elsevier Science Publisher B.V.*,

*Amsterdam*, 1–87.

Thomas, L. (2013): *Coal Geology* (Second Edi), A John Wiley & Sons, Ltd., Garsington Road, U.K.

Vignes, A. (2011): *Extrective Metallurgy 2 Metallurgical Reaction Process*, ISTE Ltd and John Wiley & Sons, Inc., London, U.K and USA Hoboken, retrieved from internet: [www.iste.co.uk](http://www.iste.co.uk).

Wang, W., Qin, Y., Sang, S., Zhu, Y., Wang, C., and Weiss, D. J. (2008): International Journal of Coal Geology Geochemistry of rare earth elements in a marine in fl uenced coal and its organic solvent extracts from the Antaibao mining district , Shanxi , China, *International Journal of Coal Geology*, 76(4), 309–317. <https://doi.org/10.1016/j.coal.2008.08.012>

Ward, C. R. (2016): International Journal of Coal Geology Analysis , origin and signi fi cance of mineral matter in coal : An updated review, *International Journal of Coal Geology*, 165, 1–27. <https://doi.org/10.1016/j.coal.2016.07.014>

Xue, B., Shao-hua, Y. I. N., Yao, L. U. O., and Wen-yuan, W. U. (2011): Leaching kinetics of bastnaesite concentrate in HCl solution, *Transactions of Nonferrous Metals Society of China*, 21(10), 2306–2310. [https://doi.org/10.1016/S1003-6326\(11\)61012-1](https://doi.org/10.1016/S1003-6326(11)61012-1)

Zhang, F., Yamasaki, S., and Kimura, K. (2001): Rare earth element content in various waste ashes and the potential risk to Japanese soils, 27, 393–398.

Zhou, B., Li, Z., and Chen, C. (2017): Global Potential of Rare Earth Resources and Rare Earth Demand from Clean Technologies, *MDPI*. <https://doi.org/10.3390/min7110203>