

REFERENCE LIST OF THE SUPPLEMENTARY MATERIALS FOR:

N. T. Nassar, J. Brainard, A. L. Gulley, R. Manley, G. R. Matos, G. W. Lederer, L. Bird, D. Pineault, E. Alonso, J. Gambogi, S. M. Fortier, Evaluating the mineral commodity supply risk of the U.S. manufacturing sector. *Science Advances* (2020).

References

41. E. L. Bray, “Bauxite and alumina” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 10.1-10.14.
42. E. L. Bray, “Bauxite and alumina” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 10.1-10.13.
43. E. L. Bray, “Bauxite and alumina” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 10.1-10.13.
44. E. L. Bray, “Bauxite and alumina” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 10.1-10.13.
45. E. L. Bray, “Bauxite and alumina” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 10.1-10.14.
46. E. L. Bray, “Bauxite and alumina” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 10.1-10.13.
47. E. L. Bray, “Aluminum” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 5.1-5.18.
48. E. L. Bray, “Aluminum” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 5.1-5.18.
49. E. L. Bray, “Aluminum” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 5.1-5.20.
50. E. L. Bray, “Aluminum” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 5.1-5.19.
51. E. L. Bray, “Aluminum” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 5.1-5.21.
52. E. L. Bray, “Aluminum” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 5.1-5.22.
53. M. Bertram, S. Ramkumar, H. Rechberger, G. Rombach, C. Bayliss, K. J. Martchek, D. B. Müller, G. Liu, A regionally-linked, dynamic material flow modelling tool for rolled, extruded and cast aluminium products. *Resour. Conserv. Recycl.* **125**, 48–69 (2017).
54. The International Aluminium Institute, Global aluminum cycle (2016), (available at <http://www.world-aluminium.org/statistics/massflow/>).
55. K. Klochko, “Antimony” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I, pp. 6.1-6.9.
56. K. Klochko, “Antimony” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 6.1-6.10.
57. D. E. Guberman, “Antimony” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 6.1-6.10.
58. D. E. Guberman, “Antimony” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA,

- 2016), vol. I, pp. 6.1-6.8.
59. J. F. Carlin, “Antimony” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 6.1-6.8.
60. J. F. Carlin, “Antimony” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 6.1-6.8.
61. S. Hastorun, “The mineral industry of Iran” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 52.1-52.21.
62. S. Hastorun, “The mineral industry of Iran” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 50.1-50.14.
63. E. Safirova, “The mineral industry of Kazakhstan” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 24.1-24.16.
64. E. Safirova, “The mineral industry of Kazakhstan” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 24.1-24.14.
65. E. Safirova, “The mineral industry of Kazakhstan” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 24.1-24.12.
66. E. Safirova, “The mineral industry of Kazakhstan” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 24.1-24.4.
67. M. Brininstool, “The mineral industry of Kazakhstan” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 24.1-24.13.
68. Y. Fong-Sam, “The mineral industry of Laos” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 17.1-17.5.
69. Y. Fong-Sam, “The mineral industry of Laos” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 15.1-15.6.
70. Y. Fong-Sam, “The mineral industry of Laos” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 16.1-16.6.
71. K. Renaud, “The mineral industry of Pakistan” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 20.1-20.11.
72. K. Renaud, “The mineral industry of Pakistan” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 21.1-21.9.
73. Roskill Information Services Ltd., *The world market for antimony to 2020* (Roskill Information Services Ltd., London, 2015).
74. Roskill Information Services Ltd., *Antimony: global industry, markets and outlook to 2028* (Roskill Information Services Ltd., London, 2018).
75. U.S. Census Bureau, USA Trade Online (2018), (available at <https://usatrade.census.gov/>).
76. M. W. George, “Arsenic” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 7.1-7.3.
77. M. Brininstool, “Arsenic” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 7.1-7.4.
78. G. M. Bedinger, “Arsenic” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 7.1-7.4.
79. G. M. Bedinger, “Arsenic” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 7.1-7.4.
80. G. M. Bedinger, “Arsenic” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 7.1-7.4.
81. G. M. Bedinger, “Arsenic” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA,

- 2013), vol. I, pp. 7.1-7.5.
82. M. E. McRae, “Barite - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I.
 83. M. E. McRae, “Barite” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 9.1-9.10.
 84. M. E. McRae, “Barite” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 9.1-9.9.
 85. M. E. McRae, “Barite” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 9.1-9.9.
 86. M. M. Miller, “Barite” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 9.1-9.10.
 87. M. M. Miller, “Barite” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 9.1-9.8.
 88. C. S. Kuo, “The mineral industry of Afghanistan” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 2.1-2.4.
 89. E. Safirova, “The mineral industry of Armenia” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 3.1-3.7.
 90. E. Safirova, “The mineral industry of Armenia” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 3.1-3.6.
 91. E. Safirova, “The mineral industry of Armenia” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 3.1-3.6.
 92. M. Brininstool, “The mineral industry of Bosnia and Herzegovina” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 8.1-8.3.
 93. Y. Soto-Viruet, “The mineral industry of Bosnia and Herzegovina” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 8.1-8.4.
 94. S. Xun, “The mineral industry of Bosnia and Herzegovina” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 8.1-8.5.
 95. S. Hastorun, “The mineral industry of Bosnia and Herzegovina” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 8.1-8.10.
 96. J. R. Matzko, “The mineral industry of Bosnia and Herzegovina” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 8.1-8.10.
 97. S. T. Anderson, “The mineral industry of Chile” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 7.1-7.18.
 98. M. Taib, “The mineral industry of Egypt” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 14.1-14.11.
 99. M. Taib, “The mineral industry of Egypt” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 49.1-49.14.
 100. T. R. Yager, “The mineral industry of Nigeria” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 32.1-32.10.
 101. T. R. Yager, “The mineral industry of Nigeria” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 31.1-31.10.
 102. M. Plaza-Toledo, “The mineral industry of Liberia - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III.
 103. M. Brininstool, “The mineral industry of Poland” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 35.1-35.12.

104. A. C. Gurmendi, “The mineral industry of Portugal” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 36.1-36.6.
105. S. Xun, “The mineral industry of Portugal” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 36.1-36.5.
106. A. A. Perez, “The mineral industry of Portugal” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 36.1-36.5.
107. P. M. Mobbs, “The mineral industry of Saudi Arabia” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 56.1-56.6.
108. P. M. Mobbs, “The mineral industry of Saudi Arabia” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 56.1-56.6.
109. W. A. Abdulameer, “The mineral industry of Saudi Arabia” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 59.1-59.10.
110. M. Taib, “The mineral industry of Saudi Arabia” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 62.1-62.10.
111. M. Taib, “The mineral industry of Saudi Arabia” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 60.1-60.5.
112. M. Taib, “The mineral industry of Tunisia” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 62.1-62.7.
113. M. M. Miller, “Barite” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 9.1-9.8.
114. M. M. Miller, “Barite” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 9.1-9.8.
115. M. M. Miller, “Barite” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 9.1-9.8.
116. G. Liu, D. B. Müller, Mapping the global journey of anthropogenic aluminum: a trade-linked multilevel material flow analysis. *Environ. Sci. Technol.* **47**, 11873–11881 (2013).
117. U.S. Geological Survey, *Mineral Commodity Summaries 2018* (U.S. Geological Survey, Reston, VA, 2018).
118. U.S. Geological Survey, *Mineral Commodity Summaries 2017* (U.S. Geological Survey, Reston, VA, 2017).
119. U.S. Geological Survey, *Mineral Commodity Summaries 2016* (U.S. Geological Survey, Reston, VA, 2016).
120. U.S. Geological Survey, *Mineral Commodity Summaries 2015* (U.S. Geological Survey, Reston, VA, 2015).
121. U.S. Geological Survey, *Mineral Commodity Summaries 2014* (U.S. Geological Survey, Reston, VA, 2014).
122. U.S. Geological Survey, *Mineral Commodity Summaries 2013* (U.S. Geological Survey, Reston, VA, 2013).
123. U.S. Geological Survey, *Mineral Commodity Summaries 2012* (U.S. Geological Survey, Reston, VA, 2012).
124. B. W. Jaskula, “Beryllium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 11.1-11.7.
125. B. W. Jaskula, “Beryllium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 11.1-11.7.
126. B. W. Jaskula, “Beryllium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 11.1-11.7.

127. B. W. Jaskula, “Beryllium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 11.1-11.7.
128. B. W. Jaskula, “Beryllium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 11.1-11.7.
129. B. W. Jaskula, “Beryllium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 11.1-11.7.
130. K. Klochko, “Bismuth” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 12.1-12.5.
131. C. S. Anderson, “Bismuth” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 12.1-12.6.
132. C. S. Anderson, “Bismuth” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 12.1-12.6.
133. D. L. Edelstein, “Bismuth” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 12.1-12.5.
134. J. F. Carlin, “Bismuth” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 12.1-12.4.
135. J. F. Carlin, “Bismuth” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 12.1-12.4.
136. A. C. Tolcin, “Cadmium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 16.1-16.9.
137. A. C. Tolcin, “Cadmium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 15.1-15.8.
138. A. C. Tolcin, “Cadmium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 15.1-15.9.
139. A. C. Tolcin, “Cadmium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 15.1-15.7.
140. A. C. Tolcin, “Cadmium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 15.1-15.7.
141. A. C. Tolcin, “Cadmium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 15.1-15.8.
142. Argus Metals International, Rare earth oxide prices (2019), (available at <https://metals.argusmedia.com/>).
143. R. Schulte, “Chromium - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I.
144. J. F. Papp, “Chromium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 17.1-17.18.
145. J. F. Papp, “Chromium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 17.1-17.17.
146. J. F. Papp, “Chromium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 17.1-17.22.
147. J. F. Papp, “Chromium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 17.1-17.21.
148. J. F. Papp, “Chromium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 17.1-17.22.
149. Geological Survey of Finland, Metals and Minerals Production (2019), (available at <http://en GTK.fi/informationsservices/mineralproduction/index.html>).

150. K. B. Shedd, “Cobalt - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I.
151. K. B. Shedd, “Cobalt” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 19.1-19.19.
152. K. B. Shedd, “Cobalt” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 19.1-19.20.
153. K. B. Shedd, “Cobalt” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 19.1-19.19.
154. K. B. Shedd, “Cobalt” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 19.1-19.21.
155. K. B. Shedd, “Cobalt” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 19.1-19.21.
156. Roskill Information Services Ltd., *Cobalt: global industry, markets and outlook to 2027* (Roskill Information Services Ltd., London, 2018).
157. D. M. Flanagan, “Copper - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I.
158. M. Brininstool, D. M. Flanagan, “Copper” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 20.1-20.29.
159. M. Brininstool, “Copper” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 20.1-20.28.
160. M. Brininstool, “Copper” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 20.1-20.29.
161. M. Brininstool, “Copper” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 20.1-20.26.
162. D. L. Edelstein, “Copper” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 20.1-20.25.
163. A. O. Tanner, “Feldspar and nepheline syenite - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I.
164. A. O. Tanner, “Feldspar and nepheline syenite” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 24.1-24.10.
165. A. O. Tanner, “Feldspar and nepheline syenite” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 24.1-24.9.
166. A. O. Tanner, “Feldspar and nepheline syenite” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 24.1-24.9.
167. A. O. Tanner, “Feldspar and nepheline syenite” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 24.1-24.9.
168. A. O. Tanner, “Feldspar and nepheline syenite” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 24.1-24.8.
169. B. W. Jaskula, “Gallium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 27.1-27.10.
170. C. Licht, L. T. Peiró, G. Villalba, Global substance flow analysis of gallium, germanium, and indium: quantification of extraction, uses, and dissipative losses within their anthropogenic cycles. *J. Ind. Ecol.* **19**, 890–903 (2015).
171. P. Willis, A. Chapman, A. Fryer, “Study of by-products of copper, lead, zinc, and nickel” (International Lead and Zinc Study Group, International Nickel Study Group, International Copper Study Group, Aylesbury, UK, 2012).

172. C. L. Thomas, “Germanium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 30.1-30.7.
173. British Geological Survey, World mineral statistics data (2019), (available at <https://www.bgs.ac.uk/mineralsuk/statistics/wms.cfc?method=searchWMS>).
174. E. Safirova, “The mineral industry of Russia - 2015 Annual Tables (advance data release)” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III.
175. E. Safirova, “The mineral industry of Russia” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 38.1-38.23.
176. E. Safirova, “The mineral industry of Russia” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 38.1-38.20.
177. E. Safirova, “The mineral industry of Russia” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 38.1-38.22.
178. E. Safirova, “The mineral industry of Russia” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 38.1-38.21.
179. E. Safirova, “The mineral industry of Ukraine” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 48.1-48.12.
180. E. Safirova, “The mineral industry of Ukraine” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 48.1-48.11.
181. E. Safirova, “The mineral industry of Ukraine” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 48.1-48.10.
182. E. Safirova, “The mineral industry of Ukraine” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 47.1-47.12.
183. M. Brininstool, “The mineral industry of Ukraine” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 47.1-47.12.
184. M. W. George, “Gold” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I, pp. 31.1-31.15.
185. M. W. George, “Gold” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 31.1-31.15.
186. M. W. George, “Gold” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 31.1-31.16.
187. M. W. George, “Gold” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 31.1-31.18.
188. M. W. George, “Gold” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 31.1-31.17.
189. M. W. George, “Gold” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 31.1-31.23.
190. R. O’Connell, C. Alexander, R. Strachan, B. Alway, S. Nambiar, J. Wiebe, S. Li, D. Aranda, *GFMS Gold Survey 2017* (Thomson Reuters, London, 2017).
191. D. W. Olson, “Graphite - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I.
192. D. W. Olson, “Graphite” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 32.1-32.13.
193. D. W. Olson, “Graphite” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 32.1-32.14.
194. D. W. Olson, “Graphite” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 32.1-32.12.

195. D. W. Olson, “Graphite” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 32.1-32.10.
196. D. W. Olson, “Graphite” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 32.1-32.10.
197. Roskill Information Services Ltd., *Natural and synthetic graphite: global industry, markets and outlook to 2027* (Roskill Information Services Ltd., London, 2018).
198. U.S. Geological Survey, *Mineral Commodity Summaries 2011* (U.S. Geological Survey, Reston, VA, 2011).
199. U.S. Geological Survey, *Mineral Commodity Summaries 2010* (U.S. Geological Survey, Reston, VA, 2010).
200. U.S. Geological Survey, *Mineral Commodity Summaries 2009* (U.S. Geological Survey, Reston, VA, 2009).
201. J. E. Hamak, “Helium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 34.1-34.8.
202. J. E. Hamak, “Helium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 35.1-35.8.
203. J. E. Hamak, “Helium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 34.1-34.8.
204. J. E. Hamak, “Helium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 34.1-34.6.
205. J. B. Peterson, P. J. Madrid, “Helium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 34.1-34.6.
206. J. B. Peterson, P. J. Madrid, “Helium” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 34.1-34.7.
207. N. Pacheco, D. Thomas, “Helium” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 34.1-34.6.
208. N. Pacheco, “Helium” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 34.1-34.6.
209. N. Pacheco, “Helium” in *2007 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 34.1-34.8.
210. C. S. Anderson, “Indium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I, pp. 35.1-35.6.
211. A. C. Tolcin, “Indium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 35.1-35.8.
212. A. C. Tolcin, “Indium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 35.1-35.7.
213. A. C. Tolcin, “Indium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 35.1-35.7.
214. A. C. Tolcin, “Indium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 35.1-35.7.
215. A. C. Tolcin, “Indium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 35.1-35.5.
216. T. R. Yager, “The mineral industry of South Africa - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III.
217. T. R. Yager, “The mineral industry of South Africa - 2015 Annual Tables (advance data release)” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III.

218. T. R. Yager, “The mineral industry of South Africa” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 39.1-39.29.
219. T. R. Yager, “The mineral industry of South Africa” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 40.1-40.28.
220. T. R. Yager, “The mineral industry of South Africa” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 38.1-38.26.
221. T. R. Yager, “The mineral industry of South Africa” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 38.1-38.25.
222. J. J. Barry, “The mineral industry of Zimbabwe - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III.
223. J. J. Barry, “The mineral industry of Zimbabwe” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 45.1-45.8.
224. J. J. Barry, “The mineral industry of Zimbabwe” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 46.1-46.11.
225. P. M. Mobbs, “The mineral industry of Zimbabwe” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 48.1-48.8.
226. P. M. Mobbs, “The mineral industry of Zimbabwe” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 45.1-45.11.
227. P. M. Mobbs, “The mineral industry of Zimbabwe” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 45.1-45.9.
228. Natural Resources Canada, Minerals and Metals Facts (2018), (available at <http://www.nrcan.gc.ca/mining-materials/facts/platinum/20520>).
229. IHS Markit, Global Trade Atlas (2019), (available at <https://connect.ihs.com/gta/standardreports>).
230. N. T. Nassar, “Global stocks and flows, losses, and recoveries of platinum-group elements,” thesis, Yale University, New Haven, CT (2015).
231. C. A. Tuck, “Iron ore - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I.
232. C. A. Tuck, “Iron ore” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 39.1-39.14.
233. C. A. Tuck, “Iron ore” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 39.1-39.15.
234. C. A. Tuck, “Iron ore” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 39.1-39.19.
235. C. A. Tuck, “Iron ore” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 39.1-39.18.
236. C. A. Tuck, R. L. Virta, “Iron ore” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 39.1-39.16.
237. A. A. Perez, “The mineral industry of Germany” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 18.1-18.13.
238. A. A. Perez, “The mineral industry of Germany” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 18.1-18.14.
239. T. R. Yager, “The mineral industry of Kenya” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 23.1-23.6.
240. T. R. Yager, “The mineral industry of Kenya” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 23.1-23.6.

241. T. R. Yager, "The mineral industry of Kenya" in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 23.1-23.5.
242. T. R. Yager, "The mineral industry of Kenya" in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 23.1-23.4.
243. T. R. Yager, "The mineral industry of Kenya" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 23.1-23.4.
244. A. C. Gurmendi, "The mineral industry of Portugal" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 36.1-36.6.
245. J. J. Barry, "The mineral industry of Togo - 2015 Annual Tables (advance data release)" in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III.
246. T. R. Yager, "The mineral industry of Uganda" in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 43.1-43.5.
247. T. R. Yager, "The mineral industry of Uganda" in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 45.1-45.4.
248. T. R. Yager, "The mineral industry of Uganda" in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 46.1-46.4.
249. T. R. Yager, H. R. Newman, "The mineral industry of Uganda" in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 43.1-43.4.
250. H. R. Newman, "The mineral industry of Uganda" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 43.1-43.4.
251. K. Klochko, "Lead - 2016 Annual Tables (advance data release)" in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I.
252. D. E. Guberman, "Lead" in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 42.1-42.16.
253. D. E. Guberman, "Lead" in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 42.1-42.16.
254. D. E. Guberman, "Lead" in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 42.1-42.16.
255. D. E. Guberman, "Lead" in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 42.1-42.16.
256. D. E. Guberman, "Lead" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 42.1-42.18.
257. K. Renaud, "The mineral industry of Tajikistan - 2016 Annual Tables (advance data release)" in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III.
258. O. Bermúdez-Lugo, "The mineral industry of Ghana" in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 19.1-19.7.
259. M. Taib, "The mineral industry of Lebanon" in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 55.1-55.5.
260. M. Taib, "The mineral industry of Lebanon" in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 57.1-57.5.
261. P. M. Mobbs, "The mineral industry of Nigeria" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 34.1-34.4.
262. K. Renaud, "The mineral industry of Sri Lanka" in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 27.1-27.5.
263. K. Renaud, "The mineral industry of Sri Lanka" in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 24.1-24.7.

264. K. Renaud, “The mineral industry of Sri Lanka” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 26.1-26.5.
265. Y. Fong-Sam, “The mineral industry of Venezuela” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 18.1-18.8.
266. S. Wacaster, “The mineral industry of Venezuela” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 18.1-18.8.
267. A. C. Gurmendi, “The mineral industry of Venezuela” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 16.1-16.10.
268. B. W. Jaskula, “Lithium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 44.1-44.10.
269. B. W. Jaskula, “Lithium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 44.1-44.11.
270. B. W. Jaskula, “Lithium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 44.1-44.12.
271. B. W. Jaskula, “Lithium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 44.1-44.11.
272. B. W. Jaskula, “Lithium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 44.1-44.12.
273. B. W. Jaskula, “Lithium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 44.1-44.13.
274. Roskill Information Services Ltd., *Lithium: global industry, markets and outlook, 2018* (Roskill Information Services Ltd., London, 2018).
275. E. L. Bray, “Magnesium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 45.1-45.11.
276. E. L. Bray, “Magnesium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 45.1-45.10.
277. E. L. Bray, “Magnesium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 45.1-45.10.
278. E. L. Bray, “Magnesium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 45.1-45.9.
279. E. L. Bray, “Magnesium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 45.1-45.9.
280. E. L. Bray, “Magnesium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 45.1-45.10.
281. L. A. Corathers, “Manganese” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I, pp. 47.1-47.16.
282. L. A. Corathers, “Manganese” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 47.1-47.19.
283. L. A. Corathers, “Manganese” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 47.1-47.21.
284. L. A. Corathers, “Manganese” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 47.1-47.19.
285. L. A. Corathers, “Manganese” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 47.1-47.20.
286. E. Safirova, “The mineral Industry of Bulgaria - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019).

287. E. Safirova, "The mineral industry of Bulgaria" in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 9.1-9.8.
288. S. Xun, "The mineral industry of Bulgaria" in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 9.1-9.7.
289. Y. Soto-Viruet, "The mineral industry of Bulgaria" in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 9.1-9.7.
290. M. Brininstool, "The mineral industry of Bulgaria" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 9.1-9.6.
291. A. A. Perez, "The mineral industry of Burkina Faso - 2016 Annual Tables (advance data release)" in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III.
292. O. Bermúdez-Lugo, "The mineral industries of Burkina Faso and Côte d'Ivoire" in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 5.1-5.7.
293. O. Bermúdez-Lugo, "The mineral industries of Burkina Faso and Côte d'Ivoire" in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 5.1-5.9.
294. S. Wacaster, "The mineral industry of Chile" in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 7.1-7.19.
295. S. T. Anderson, "The mineral industry of Chile" in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 7.1-7.22.
296. A. A. Perez, "The mineral industry of Cote d'Ivoire - 2016 Annual Tables (advance release)" in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III.
297. O. Bermúdez-Lugo, "The mineral industries of Côte d'Ivoire and Togo" in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 15.1-15.4.
298. O. Bermúdez-Lugo, "The mineral industry of Côte d'Ivoire" in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 12.1-12.5.
299. O. Bermúdez-Lugo, "The mineral industry of Cote d'Ivoire" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 12.1-12.5.
300. M. Taib, "The mineral industry of Egypt" in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 51.1-51.12.
301. M. Taib, "The mineral industry of Egypt" in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 17.1-17.13.
302. M. Taib, "The mineral industry of Egypt" in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 14.1-14.12.
303. E. Safirova, "The mineral industry of Georgia" in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 17.1-17.7.
304. E. Safirova, "The mineral industry of Georgia" in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 17.1-17.6.
305. E. Safirova, "The mineral industry of Georgia" in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 17.1-17.5.
306. E. Safirova, "The mineral industry of Georgia" in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 17.1-17.6.
307. E. Safirova, "The mineral industry of Georgia" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 17.1-17.6.
308. H. R. Newman, "The mineral industry of Greece" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 19.1-19.6.
309. S. Hastorun, "The mineral industry of Hungary" in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 20.1-20.4.

310. S. Hastorun, “The mineral industry of Hungary” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 20.1-20.6.
311. S. Hastorun, “The mineral industry of Hungary” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 20.1-20.10.
312. S. Hastorun, “The mineral industry of Hungary” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 20.1-20.10.
313. S. T. Anderson, “The mineral industry of Hungary” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 20.1-20.7.
314. S. T. Anderson, “The mineral industry of Hungary” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 20.1-20.10.
315. M. Plaza-Toledo, “The mineral industry of Indonesia” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 13.1-13.8.
316. S. Wacaster, “The mineral industry of Indonesia” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 11.1-11.7.
317. S. Wacaster, “The mineral industry of Indonesia” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 12.1-12.7.
318. C. S. Kuo, “The mineral industry of Indonesia” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 11.1-11.9.
319. C. S. Kuo, “The mineral industry of Indonesia” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 12.1-12.8.
320. U.S. Geological Survey, “The mineral industry of Iran” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 51.1-51.9.
321. P. M. Mobbs, “The mineral industry of Iran” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 48.1-48.10.
322. P. M. Mobbs, “The mineral industry of Iran” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 48.1-48.11.
323. M. Taib, “The mineral industries of Morocco and Western Sahara” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 57.1-57.12.
324. M. Taib, “The mineral industries of Morocco and Western Sahara” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 59.1-59.13.
325. M. Taib, “The mineral industries of Morocco and Western Sahara” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 32.1-32.12.
326. H. R. Newman, “The mineral industries of Morocco and Western Sahara” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 31.1-31.9.
327. H. R. Newman, “The mineral industries of Morocco and Western Sahara” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 31.1-31.8.
328. J. J. Barry, “The mineral industries of Angola and Namibia” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 2.1-2.12.
329. O. Bermúdez-Lugo, “The mineral industries of Angola and Namibia” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 2.1-2.12.
330. O. Bermúdez-Lugo, “The mineral industry of Namibia” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 34.1-34.4.
331. O. Bermúdez-Lugo, “The mineral industry of Namibia” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 33.1-33.7.
332. O. Bermúdez-Lugo, “The mineral industry of Namibia” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2014), vol. III, pp. 33.1-33.8.

333. W. A. Abdulameer, M. Taib, “The mineral industry of Oman” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 60.1-60.11.
334. Y. Fong-Sam, “The mineral industry of the Philippines” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 24.1-24.7.
335. Y. Fong-Sam, “The mineral industry of the Philippines” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 22.1-22.8.
336. Y. Fong-Sam, “The mineral industry of the Philippines” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 23.1-23.9.
337. Y. Fong-Sam, “The mineral industry of the Philippines” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 22.1-22.8.
338. Y. Fong-Sam, “The mineral industry of the Philippines” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 23.1-23.8.
339. S. Xun, “The mineral industry of Romania” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 37.1-37.8.
340. A. A. Perez, “The mineral industry of Romania” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 37.1-37.6.
341. A. A. Perez, “The mineral industry of Romania” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 37.1-37.5.
342. T. R. Yager, “The mineral industry of Sudan” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 42.1-42.5.
343. T. R. Yager, “The mineral industry of Sudan” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 40.1-40.5.
344. S. D. Buteyn, “The mineral industry of Thailand” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 29.1-29.6.
345. Y. Fong-Sam, “The mineral industry of Thailand” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 26.1-26.8.
346. Y. Fong-Sam, “The mineral industry of Thailand” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 28.1-28.4.
347. L. Shi, “The mineral industry of Thailand” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 25.1-25.6.
348. L. Shi, “The mineral industry of Thailand” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 28.1-28.4.
349. S. Hastorun, “The mineral industry of Turkey” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 46.1-46.17.
350. S. Hastorun, “The mineral industry of Turkey” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 46.1-46.26.
351. S. Hastorun, “The mineral industry of Turkey” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 46.1-46.22.
352. P. M. Mobbs, “The mineral industry of Turkey” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 58.1-58.13.
353. P. M. Mobbs, “The mineral industry of Turkey” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 58.1-58.14.
354. Y. Fong-Sam, “The mineral industry of Vietnam” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 30.1-30.13.
355. Y. Fong-Sam, “The mineral industry of Vietnam” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 27.1-27.12.

356. Y. Fong-Sam, “The mineral industry of Vietnam” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 29.1-29.11.
357. Y. Fong-Sam, “The mineral industry of Vietnam” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 26.1-26.11.
358. Y. Fong-Sam, “The mineral industry of Vietnam” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 28.1-28.14.
359. L. M. Trimmer, “The mineral industry of Zambia” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 44.1-44.9.
360. L. M. Trimmer, “The mineral industry of Zambia” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 46.1-46.11.
361. L. M. Trimmer, “The mineral industry of Zambia” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 47.1-47.10.
362. P. M. Mobbs, “The mineral industry of Zambia” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 44.1-44.9.
363. P. M. Mobbs, “The mineral industry of Zambia” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 44.1-44.8.
364. K. C. Curry, “Mica” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I, pp. 49.1-49.8.
365. J. C. Willet, “Mica” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 49.1-49.10.
366. J. C. Willet, “Mica” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 49.1-49.9.
367. J. C. Willet, “Mica” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2014), vol. I, pp. 49.1-49.10.
368. J. C. Willet, “Mica” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 49.1-49.10.
369. J. C. Willet, “Mica” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 49.1-49.12.
370. S. Hastorun, “The mineral industry of Austria” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. III, pp. 4.1-4.9.
371. S. Hastorun, “The mineral industry of Austria” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. III, pp. 4.1-4.13.
372. S. Hastorun, “The mineral industry of Austria” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. III, pp. 4.1-4.12.
373. S. T. Anderson, “The mineral industry of Austria” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. III, pp. 4.1-4.10.
374. S. T. Anderson, “The mineral industry of Austria” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 4.1-4.10.
375. S. Xun, “The mineral industry of China” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 9.1-9.21.
376. S. Xun, “The mineral industry of China” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. III, pp. 9.1-9.20.
377. Ministry of Land and Resources, *China land and natural resources yearbook* (Ministry of Land and Resources, Beijing, 2010).
378. Ministry of Land and Resources, *China land and natural resources yearbook* (Ministry of Land and Resources, Beijing, 2009).

379. Ministry of Land and Resources, *China land and natural resource yearbook* (Ministry of Land and Resources, Beijing, 2008).
380. J. C. Willet, “Mica” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 49.1-49.10.
381. T. P. Dolley, “Mica” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 49.1-49.13.
382. D. E. Polyak, “Molybdenum” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 50.1-50.12.
383. D. E. Polyak, “Molybdenum” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 50.1-50.12.
384. D. E. Polyak, “Molybdenum” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 50.1-50.12.
385. D. E. Polyak, “Molybdenum” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 50.1-50.12.
386. D. E. Polyak, “Molybdenum” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 50.1-50.13.
387. D. E. Polyak, “Molybdenum” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 50.1-50.12.
388. Roskill Information Services Ltd., *Molybdenum: Global industry, market and outlook to 2026* (Roskill Information Services Ltd., London, 2017).
389. M. E. McRae, “Nickel - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I.
390. M. E. McRae, “Nickel” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 51.1-51.17.
391. P. H. Kuck, “Nickel” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 51.1-51.21.
392. P. H. Kuck, “Nickel” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 51.1-51.31.
393. P. H. Kuck, “Nickel” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 51.1-51.31.
394. P. H. Kuck, “Nickel” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 51.1-51.29.
395. A. Padilla, “Niobium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I, pp. 52.1-52.8.
396. J. F. Papp, “Niobium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 52.1-52.7.
397. J. F. Papp, “Niobium (columbium) and tantalum” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 52.1-52.12.
398. J. F. Papp, “Niobium (columbium) and tantalum” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 52.1-52.17.
399. J. F. Papp, “Niobium (columbium) and tantalum” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 52.1-52.13.
400. J. F. Papp, “Niobium (columbium) and tantalum” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 52.1-52.14.
401. P. J. Loferski, Z. T. Ghalayini, S. A. Singerling, “Platinum-group metals” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 57.1-57.10.

402. P. J. Loferski, “Platinum-group metals” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 57.1-57.10.
403. P. J. Loferski, “Platinum-group metals” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 57.1-57.12.
404. P. J. Loferski, “Platinum-group metals” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 57.1-57.11.
405. P. J. Loferski, “Platinum-group metals” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 57.1-57.12.
406. P. J. Loferski, “Platinum-group metals” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 57.1-57.11.
407. CPM Group, *CPM Platinum Group Metals Yearbook 2017* (CPM Group, Brooklyn, NY, 2017), vol. 31.
408. S. Jasinski, “Phosphate rock - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 56.1-56.9.
409. S. Jasinski, “Phosphate rock” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 56.1-56.9.
410. S. Jasinski, “Phosphate rock” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 56.1-56.9.
411. S. Jasinski, “Phosphate rock” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 56.1-56.9.
412. S. Jasinski, “Phosphate rock” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 56.1-56.9.
413. S. Jasinski, “Phosphate rock” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 56.1-56.11.
414. S. Jasinski, “Potash - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I.
415. S. Jasinski, “Potash” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 58.1-58.7.
416. S. Jasinski, “Potash” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 58.1-58.6.
417. S. Jasinski, “Potash” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 58.1-58.6.
418. S. Jasinski, “Potash” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 58.1-58.7.
419. S. Jasinski, “Potash” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 58.1-58.5.
420. D. E. Polyak, “Rhenium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I, pp. 62.1-62.6.
421. D. E. Polyak, “Rhenium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 62.1-62.6.
422. D. E. Polyak, “Rhenium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 62.1-62.6.
423. D. E. Polyak, “Rhenium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 62.1-62.5.
424. D. E. Polyak, “Rhenium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 62.1-62.5.

425. D. E. Polyak, “Rhenium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 62.1-62.5.
426. T. D. Kelly, G. R. Matos, “Rhenium” in *Historical statistics for mineral and material commodities in the United States. Data Series 140* (U.S. Geological Survey, Reston, VA, 2016).
427. Anglo American Platinum, *Annual results presentation 2017* (2017; <https://www.angloamericanplatinum.com/~media/Files/A/Anglo-American-Platinum/interim-reports/annual-results-2017-booklet-with-presentation.pdf>).
428. Anglo American Platinum, *Annual results presentation 2014* (Anglo American Platinum Ltd., 2014; <https://www.angloamericanplatinum.com/~media/Files/A/Anglo-American-Platinum/annual-reports/aap-annual-results-presentation-2014.pdf>).
429. Implats, *Annual integrated report 2017* (Impala Platinum Holdings Ltd., Johannesburg, South Africa, 2017).
430. Implats, *Annual integrated report 2016* (Impala Platinum Holdings Ltd., Johannesburg, South Africa, 2016).
431. Implats, *Integrated annual report 2012* (Impala Platinum Holdings Ltd., Johannesburg, South Africa, 2012).
432. Aquarius Platinum Limited, *Annual report 2008* (Aquarius Platinum Ltd., Pretoria, South Africa, 2008).
433. Stillwater Mining Company, *2016 Annual report* (Stillwater Mining Company, Littleton, CO, 2017).
434. C. S. Anderson, “Selenium and tellurium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 65.1-65.8.
435. C. S. Anderson, “Selenium and tellurium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 65.1-65.9.
436. C. S. Anderson, “Selenium and tellurium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 65.1-65.8.
437. C. S. Anderson, “Selenium and tellurium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 65.1-65.8.
438. M. W. George, “Selenium and tellurium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 65.1-65.8.
439. M. W. George, “Selenium and tellurium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 65.1-65.9.
440. J. Feng, “China’s minor metals and the supply and demand of gallium, selenium, and tellurium” in *Minor Metals Trade Association Conference 2017* (China Nonferrous Metals Industry Association - Gallium Selenium and Tellurium Branch, Dublin, Ireland, 2017).
441. S. Bennett, “Silver - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I.
442. S. Bennett, “Silver” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 68.1-68.12.
443. M. W. George, “Silver” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 68.1-68.14.
444. R. L. Virta, “Silver” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 68.1-68.13.
445. F. C. Katrivanos, “Silver” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 68.1-68.14.
446. D. A. Kramer, “Silver” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013),

- vol. I, pp. 68.1-68.14.
447. C. Alexander, B. Alway, S. Litosh, J. Wiebe, W. Yao, D. Saha, K. Norton, S. Li, F. Guy, N. Scott-Gray, S. Goenka, *World Silver Survey 2019* (The Silver Institute, Washington, D.C., 2019).
448. R. O'Connell, C. Alexander, B. Alway, S. Litosh, S. Nambiath, J. Wiebe, W. Yao, K. Norton, S. Li, D. Aranda, N. Scott-Gray, Z. Chan, E. Balsamo, *World Silver Survey 2018* (The Silver Institute, Washington, D.C., 2018).
449. R. O'Connell, C. Alexander, R. Strachan, B. Alway, S. Nambiath, J. Wiebe, L. Wong, E. Rannestad, S. Li, D. Aranda, N. Scott-Gray, *World Silver Survey 2017* (The Silver Institute, Washington, D.C., 2017).
450. Kani Goharan Kimia, Celestite (2019), (available at <http://www.kgk-co.com/en/shop/commodity/1/4/Celestite>).
451. S. A. Singerling, J. A. Ober, "Strontium" in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 73.1-73.7.
452. S. A. Singerling, J. A. Ober, "Strontium" in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 73.1-73.5.
453. J. A. Ober, S. A. Singerling, "Strontium" in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 73.1-73.5.
454. J. A. Ober, "Strontium" in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 73.1-73.5.
455. J. A. Ober, "Strontium" in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 73.1-73.5.
456. J. A. Ober, "Strontium" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 73.1-73.5.
457. D. I. Bleiwas, J. F. Papp, T. R. Yager, *Shift in global tantalum mine production, 2000–2014* (U.S. Geological Survey, Reston, VA, 2015).
458. A. Padilla, "Tantalum" in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I, pp. 76.1-76.6.
459. Natural Resources Canada, Annual statistics of mineral production (2018), (available at <http://sead.nrcan.gc.ca/prod-prod/ann-ann-eng.aspx>).
460. A. C. Gurmendi, "The mineral industry of Peru" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. III, pp. 15.1-15.4.
461. Boliden, *2017 Annual Report: Metals for long-term value creation* (Boliden Group, Stockholm, 2017; <https://vp217.alertir.com/afw/files/press/boliden/201803060710-1.pdf>).
462. C. S. Anderson, "Tin" in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 78.1-78.9.
463. C. S. Anderson, "Tin" in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 78.1-78.9.
464. C. S. Anderson, "Tin" in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 77.1-77.9.
465. C. S. Anderson, "Tin" in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 77.1-77.9.
466. J. F. Carlin, "Tin" in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 77.1-77.9.
467. J. F. Carlin, "Tin" in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 77.1-77.10.
468. G. M. Bedinger, "Titanium - 2016 Annual Tables (advance data release)" in *2016 Minerals*

Yearbook (U.S. Geological Survey, Reston, VA, 2019), vol. I.

469. G. M. Bedinger, “Titanium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 79.1-79.15.
470. G. M. Bedinger, “Titanium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 78.1-78.16.
471. G. M. Bedinger, “Titanium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 78.1-78.14.
472. G. M. Bedinger, “Titanium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 78.1-78.14.
473. G. M. Bedinger, “Titanium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 78.1-78.16.
474. K. B. Shedd, “Tungsten” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 80.1-80.21.
475. K. B. Shedd, “Tungsten” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 80.1-80.21.
476. K. B. Shedd, “Tungsten” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 79.1-79.21.
477. K. B. Shedd, “Tungsten” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 79.1-79.20.
478. K. B. Shedd, “Tungsten” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 79.1-79.20.
479. K. B. Shedd, “Tungsten” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 79.1-79.20.
480. Roskill Information Services Ltd., *Tungsten: Global industry, markets and outlook to 2028* (Roskill Information Services Ltd., London, ed. 13th, 2019).
481. Roskill Information Services Ltd., *Tungsten: Market outlook to 2018* (Roskill Information Services Ltd., London, 2014).
482. D. E. Polyak, “Vanadium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 80.1-80.9.
483. D. E. Polyak, “Vanadium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 80.1-80.9.
484. D. E. Polyak, “Vanadium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 80.1-80.10.
485. D. E. Polyak, “Vanadium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 80.1-80.10.
486. D. E. Polyak, “Vanadium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 80.1-80.9.
487. D. E. Polyak, “Vanadium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 80.1-80.9.
488. Roskill Information Services Ltd., *Vanadium: Global industry, markets and outlook 2017* (Roskill Information Services Ltd., London, 2017).
489. C. L. Thomas, “Zinc” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 85.1-85.13.
490. A. C. Tolcin, “Zinc” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 85.1-85.14.

491. A. C. Tolcin, “Zinc” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 84.1-84.14.
492. A. C. Tolcin, “Zinc” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 84.1-84.13.
493. A. C. Tolcin, “Zinc” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 84.1-84.11.
494. A. C. Tolcin, “Zinc” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 84.1-84.12.
495. G. M. Bedinger, “Zirconium and hafnium” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2019), vol. I, pp. 86.1-86.7.
496. G. M. Bedinger, “Zirconium and hafnium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 86.1-86.7.
497. G. M. Bedinger, “Zirconium and hafnium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 85.1-85.8.
498. G. M. Bedinger, “Zirconium and hafnium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 85.1-85.7.
499. G. M. Bedinger, “Zirconium and hafnium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 85.1-85.8.
500. P. J. Loferski, “Zirconium and hafnium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 85.1-85.8.
501. United Nations Statistics Division, UN Comtrade database (2019), (available at <https://comtrade.un.org/data/>).
502. World Bank Group, World Bank Open Data (2019), (available at <http://data.worldbank.org/>).
503. International Monetary Fund, IMF DataMapper. *World Econ. Outlook* (2019), (available at <https://www.imf.org/external/datamapper/NGDPD@WEO/OEMDC/ADVEC/WEOWORLD>).
504. U.S. Department of State, U.S. Collective Defense Arrangements (2017), (available at <https://2009-2017.state.gov/s/l/treaty/collectivedefense/index.htm>).
505. E. L. Bray, “Bauxite and alumina” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 10.1-10.12.
506. E. L. Bray, “Aluminum” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 5.1-5.20.
507. K. B. Shedd, “Beryllium” in *2006 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2007), vol. I, pp. 11.1-11.6.
508. B. W. Jaskula, “Beryllium” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 11.1-11.8.
509. B. W. Jaskula, “Beryllium” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 11.1-11.8.
510. B. W. Jaskula, “Beryllium” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 11.1-11.7.
511. B. W. Jaskula, “Beryllium” in *2007 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 11.1-11.6.
512. J. F. Papp, “Chromium” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 17.1-17.24.
513. J. F. Papp, “Chromium” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 17.1-17.26.

514. J. F. Papp, “Chromium” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 17.1-17.27.
515. J. F. Papp, “Chromium” in *2007 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 17.1-17.28.
516. K. B. Shedd, “Cobalt” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 19.1-19.23.
517. D. L. Edelstein, “Copper” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 20.1-20.30.
518. D. L. Edelstein, “Copper” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 20.1-20.29.
519. D. L. Edelstein, “Copper” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 20.1-20.29.
520. D. L. Edelstein, “Copper” in *2003 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2005), vol. I, pp. 21.1-21.27.
521. B. W. Jaskula, “Gallium” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2017), vol. I, pp. 27.1-27.9.
522. B. W. Jaskula, “Gallium” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 27.1-27.9.
523. B. W. Jaskula, “Gallium” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2015), vol. I, pp. 27.1-27.8.
524. B. W. Jaskula, “Gallium” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 27.1-27.10.
525. B. W. Jaskula, “Gallium” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 27.1-27.9.
526. B. W. Jaskula, “Gallium” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 27.1-27.7.
527. B. W. Jaskula, “Gallium” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 27.1-27.8.
528. B. W. Jaskula, “Gallium” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 27.1-27.10.
529. P. J. Loferski, “Platinum-group metals” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 57.1-57.12.
530. J. D. Jorgenson, “Iron ore” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 39.1-39.20.
531. D. E. Guberman, “Lead” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. III, pp. 42.1-42.18.
532. D. A. Kramer, “Magnesium” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 45.1-45.9.
533. D. A. Kramer, “Magnesium” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 45.1-45.10.
534. D. A. Kramer, “Magnesium” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 45.1-45.10.
535. Stillwater Mining Company, *2011 Annual Report* (Stillwater Mining Company, Littleton, CO, 2012).
536. J. F. Papp, “Niobium (columbium) and tantalum” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 52.1-52.14.

537. J. F. Papp, “Niobium (columbium) and tantalum” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 52.1-52.14.
538. J. F. Papp, “Niobium (columbium) and tantalum” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 52.1-52.14.
539. J. F. Papp, “Niobium (columbium) and tantalum” in *2007 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 52.1-52.14.
540. K. B. Shedd, “Tungsten” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 79.1-79.21.
541. D. E. Polyak, “Vanadium” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 80.1-80.10.
542. A. C. Tolcin, “Zinc” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 84.1-84.11.
543. E. L. Bray, “Bauxite and alumina” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 10.1-10.13.
544. E. L. Bray, “Bauxite and alumina” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 10.1-10.11.
545. E. L. Bray, “Bauxite and alumina” in *2007 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 10.1-10.13.
546. The Aluminum Association, *2016 Aluminum statistical review* (The Aluminum Association, Arlington, VA, 2017).
547. W. C. Buterman, J. F. Carlin, “Mineral Commodity Profiles: Antimony” (U.S. Geological Survey, Reston, VA, 2004).
548. P. A. Plunkert, “Antimony” in *Mineral Facts and Problems* (U.S. Bureau of Mines, Washington, D.C., 1985), pp. 33–42.
549. J. F. Carlin, “Antimony” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 6.1-6.8.
550. J. F. Carlin, “Antimony” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 6.1-6.8.
551. J. F. Carlin, “Antimony” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 6.1-6.8.
552. Brush Engineered Materials Inc., *2007 annual report* (Brush Engineered Materials Inc., Cleveland, OH, 2008).
553. Brush Engineered Materials Inc., *2008 annual report* (Brush Engineered Materials Inc., Mayfield Heights, OH, 2009).
554. Brush Engineered Materials Inc., *2009 annual report* (Brush Engineered Materials Inc., Mayfield Heights, OH, 2010).
555. Materion Corporation, *2010 annual report* (Materion Corporation, Mayfield Heights, OH, 2011).
556. Materion Corporation, *2011 annual report* (Materion Corporation, Mayfield Heights, OH, 2012).
557. Materion Corporation, *2012 annual report* (Materion Corporation, Mayfield Heights, OH, 2013).
558. Materion Corporation, *2013 annual report* (Materion Corporation, Mayfield Heights, OH, 2014).
559. Materion Corporation, *2014 annual report* (Materion Corporation, Mayfield Heights, OH, 2015).
560. Materion Corporation, *2015 annual report* (Materion Corporation, Mayfield Heights, OH, 2016).
561. Materion Corporation, *2016 annual report* (Materion Corporation, Mayfield Heights, OH, 2017).
562. J. F. Carlin, “Bismuth” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 12.1-12.5.

563. J. F. Carlin, “Bismuth” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 12.1-12.5.
564. J. F. Carlin, “Bismuth” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 12.1-12.5.
565. Roskill Information Services Ltd., *Rare Earths: Global industry, markets and outlook to 2026* (Roskill Information Services Ltd., London, ed. 16th, 2016).
566. Roskill Information Services Ltd., *Rare Earths: Global industry, markets and outlook to 2028* (Roskill Information Services Ltd., London, ed. 18th, 2018).
567. Cobalt Institute, Cobalt uses (2017), (available at <https://www.cobaltinstitute.org/cobalt-uses.html>).
568. Copper Development Association Inc., Annual data 2018: Copper supply & consumption — 1996-2017 (2018), (available at https://www.copper.org/resources/market_data/pdfs/annual_data_2018.pdf).
569. U.S. Geological Survey, Feldspar - statistics and information (2019), (available at <https://minerals.usgs.gov/minerals/pubs/commodity/feldspar/>).
570. A. O. Tanner, “Feldspar and nepheline syenite” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 24.1-24.8.
571. L. E. Apodaca, A. O. Tanner, “Feldspar and nepheline syenite” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 24.1-24.8.
572. L. E. Apodaca, “Feldspar and nepheline syenite” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 24.1-24.8.
573. U.S. Geological Survey, *Mineral Commodity Summaries 2008* (U.S. Geological Survey, Reston, VA, 2008).
574. CRU International Ltd., *Precious Metals Market Outlook* (CRU International Ltd., London, 2017).
575. Graphit Kropfmühl, Graphite for friction (2019), (available at https://www.gk-graphite.com/fileadmin/user_upload/Friction.pdf).
576. D. W. Olson, “Graphite” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 32.1-32.10.
577. D. W. Olson, “Graphite” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 32.1-32.10.
578. D. W. Olson, “Graphite” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 32.1-32.9.
579. National Research Council, *Selling the Nation’s Helium Reserve* (The National Academies Press, Washington, DC, 2010; <https://doi.org/10.17226/12844>).
580. Johnson Matthey, *PGM Market Report (multiple editions)* (Johnson Matthey Plc, Royston, Hertfordshire, UK, 2018; <http://www.platinum.matthey.com/services/market-research/pgm-market-reports>).
581. Johnson Matthey, *Platinum (multiple editions)* (Johnson Matthey Plc, Royston, Hertfordshire, UK, 2013; <http://www.platinum.matthey.com/services/market-research/market-review-archive>).
582. Johnson Matthey, Market data tables (2014), (available at <http://www.platinum.matthey.com/services/market-research/market-data-tables>).
583. D. E. Guberman, “Lead” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 42.1-42.22.
584. D. E. Guberman, “Lead” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 42.1-42.21.
585. U.S. Geological Survey, Lead - Statistics and Information (2019), (available at <https://minerals.usgs.gov/minerals/pubs/commodity/lead/>).

- [https://minerals.usgs.gov/minerals/pubs/commodity/lead/\).](https://minerals.usgs.gov/minerals/pubs/commodity/lead/)
- 586. Roskill Information Services Ltd., *Manganese: Global industry, markets and outlook, 2018* (Roskill Information Services Ltd., London, 2018).
 - 587. D. E. Polyak, “Molybdenum” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 50.1-50.14.
 - 588. D. E. Polyak, “Molybdenum” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 50.1-50.14.
 - 589. D. E. Polyak, “Molybdenum” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 50.1-50.13.
 - 590. P. H. Kuck, “Nickel” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 51.1-51.31.
 - 591. P. H. Kuck, “Nickel” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 51.1-51.29.
 - 592. P. H. Kuck, “Nickel” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 51.1-51.28.
 - 593. Selenium Tellurium Development Association, Sources of tellurium and selenium (2010), (available at https://www.stdta.org/se_te.html).
 - 594. F. Ojebuoboh, Selenium and tellurium from copper refinery slimes and their changing applications. *World Metall.* **61**, 33–39 (2008).
 - 595. The Silver Institute, Silver in brazing and soldering (2019), (available at <https://www.silverinstitute.org/silver-brazing-soldering/>).
 - 596. P. Stratton, S. Shaw, *Tantalum: Global industry, markets and outlook to 2028* (Roskill Information Services Ltd., London, 2018).
 - 597. Roskill Information Services Ltd., *Tantalum: Global industry, markets and outlook to 2020* (Roskill Information Services Ltd., London, ed. 12th, 2016).
 - 598. J. F. Carlin, “Tin” in *Mineral Facts and Problems* (U.S. Bureau of Mines, Washington, D.C., 1985 editi., 1985), pp. 847–858.
 - 599. J. F. Carlin, “Tin” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 77.1-77.10.
 - 600. J. F. Carlin, “Tin” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 77.1-77.10.
 - 601. J. F. Carlin, “Tin” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 77.1-77.10.
 - 602. J. Gambogi, “Titanium” in *2010 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2012), vol. I, pp. 78.1-78.17.
 - 603. J. Gambogi, “Titanium” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 78.1-78.18.
 - 604. J. Gambogi, “Titanium” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 78.1-78.16.
 - 605. D. E. Polyak, “Vanadium” in *2009 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2011), vol. I, pp. 80.1-80.10.
 - 606. D. E. Polyak, “Vanadium” in *2008 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2010), vol. I, pp. 80.1-80.10.
 - 607. International Lead and Zinc Study Group, *The market for zinc: fundamentals driving change* (International Lead and Zinc Study Group, Lisbon, Portugal, 2017).

608. H. Craggs, C. A. Blackmore, *International lead and zinc study group: market research zinc chemicals* (Wardell Armstrong, London, 2017).
609. Roskill Information Services Ltd., *Zirconium concentrate: Global industry markets and outlook* (Roskill Information Services Ltd., London, 2015).
610. J. Gambogi, “Rare earths - 2016 Annual Tables (advance data release)” in *2016 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I.
611. J. Gambogi, “Rare earths” in *2015 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2018), vol. I, pp. 60.1-60.18.
612. J. Gambogi, “Rare earths” in *2014 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 60.1-60.16.
613. J. Gambogi, “Rare earths” in *2013 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 60.1-60.17.
614. J. Gambogi, “Rare earths” in *2012 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2016), vol. I, pp. 60.1-60.13.
615. J. Gambogi, “Rare earths” in *2011 Minerals Yearbook* (U.S. Geological Survey, Reston, VA, 2013), vol. I, pp. 60.1-60.12.
616. Roskill Information Services Ltd., *Rare Earths: Market outlook 2020* (Roskill Information Services Ltd., London, ed. 15th, 2015).
617. Roskill Information Services Ltd., *Rare Earths & Yttrium: Market outlook to 2015* (Roskill Information Services Ltd., London, ed. 14th, 2011).
618. R. Chi, J. Tian, *Weathered crust elution-deposited rare earth ores* (Nova Science Publishers, New York, 2008).
619. L. Lynas Corporation, Increase in Mt Weld resource estimate for the Central Lanthanide Deposit and Duncan Deposit (2012), (available at http://member.afraccess.com/media?id=CMN://2A664047&filename=20120118/LYC_01260334.pdf).
620. P. Krumholz, “Brazilian practice for monazite treatment” in *Symposium on Rare Metals* (Sendai, Japan, 1991).
621. R. N. Patra, Latest scenario in rare earth and atomic minerals in India (2014), (available at https://mines.gov.in/writereaddata/UploadFile/IREL_PDAC_2014.pdf).
622. Y. C. Wong, *The mining, processing, and economic significance of rare earth and yttrium minerals: an overview* (Geological Survey of Malaysia, 1985).
623. Academy of Sciences Malaysia, National Processors’ Council, “Rare earth industries: Moving Malaysia’s green economy forward” (Academy of Sciences Malaysia, Kuala Lumpur, 2011).
624. G. W. Johnson, T. E. Sisneros, “Analysis of rare-earth elements in ore concentrate samples using direct current plasma spectrometry” in *Proceedings of the 15th Rare-earth Research Conference* (Plenum Press, Rolla, MO, 1981).
625. Y. Rabinovich, “Main modern trends in exploratory development of raw materials and magnets production” in *The outlook for magnetic materials in Eastern Europe* (Berlin, 1991), p. 22.
626. J. B. Hedrick, “Rare earths: The lanthanides, yttrium, and scandium” in *Minerals Yearbook 1990* (U.S. Bureau of Mines, Washington, D.C., 1990), vol. I, pp. 903–922.
627. P. Pichestapong, “Extraction of uranium from Thai monazite ore” in *Technical meeting on low grade uranium ore* (International Atomic Energy Agency, Vienna, 2010).
628. Molycorp, 2014 annual report (2014), (available at <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9NTg1MDIxENoaWxkSUQ9MjkzMTg4fFR5cGU9MQ==&t=1>).

629. Y. Watanabe, Japan's search for alternative rare earths supply (2010), (available at <https://pdfslide.net/documents/japans-search-for-alternative-rare-earth-supply.html>).
630. Z. B. Zang, L. K. Yi King, K. Chu, W. W. Cheng, W. W. Cheng, Rare earth industry in China. *Hydrometallurgy*. **9**, 205–210 (1982).
631. Chinese Society of Rare Earths, *Chinese rare earth yearbook 2010* (Chinese Society of Rare Earths, Beijing, 2010).
632. H. Murakami, S. Ishihara, REE mineralization of weathered crust and clay sediment on granitic rocks in the Sanyo Belt, SW Japan and the southern Jiangxi Province, China. *Resour. Geol.* **58**, 373–401 (2008).
633. F. Murtagh, P. Legendre, Ward's Hierarchical Agglomerative Clustering Method: Which Algorithms Implement Ward's Criterion? *J. Classif.* **31**, 274–295 (2014).
634. J. H. Ward, Hierarchical grouping to optimize an objective function. *J. Am. Stat. Assoc.* **58** (1963), pp. 236–244.