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#### Sommario/riassunto

Hydrometallurgy, which involves the use of aqueous solutions for the recovery of metals from ores, concentrates, and recycled or residual material, plays an integral role in the multi-billion dollar minerals

processing industry. There are numerous hydrometallurgical process technologies used for recovering metals, such as: agglomeration; leaching; solvent extraction/ion exchange; metal recovery; and remediation of tailings/waste. Modern hydrometallurgical routes to extract metals from their ores are faced with a number of issues related to both the chemistry and engineering aspects of the processes involved. These issues include declining ore grade, variations in mineralogy across the deposits and geo-metallurgical locations of the ore site; which would influence the hydrometallurgical route chosen. The development of technologies to improve energy efficiency, water/resources consumption and waste remediation across the circuit is also an important factor to be considered. Therefore, there is an increasing need to develop novel solutions to these existing problems, to implement environmentally sustainable practices in the recovery of these valuable metals. Papers on recent advances, and review articles, particularly in regard to fundamental chemistry and the development of novel techniques and technologies in commercial processing of mineral commodities from their ores, are included in this Special Monograph on "Hydrometallurgy".

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