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Abstract	:	Printed circuit boards (PCBs) are the primary component of electrical and electronic devices, as well as a valuable and precious metal sources due to its great economic value. Gold (Au) is mainly used in jewelry and electronics. In the electronics industry, Au is used as contact materials or plating layers because of its excellent electric conductivity and chemical stability. The rapid growth of technology caused in the replacement of obsolete electrical and electronic instruments, which has resulted in an increase in waste PCBs from electronic equipment. In this study, the statistical optimization of the leaching parameters of gold (Au) extraction from electronic waste (e-waste) such as PCBs using iodine/iodide leaching solution added with sodium hypochlorite was investigated. Optimum experimental conditions were investigated with the application of the Taguchi method using L16 Taguchi Orthogonal Array (OA) at four levels with five factors at each level. The extraction parameters were temperature, leaching time, iodine/iodide ratio, oxidant dosage and solid-to-liquid (S/L) ratio. The preliminary study verifies that the proposed Taguchi method is good at determining the optimal process parameter at various levels. The result reveals the optimum parameters for Au extracted from e-waste are in a solution containing iodine/iodide solution and sodium hypochlorite at a ratio of 1:8, 60 minutes leaching time, temperature of 90oC, S/L ratio of 1:5 and 10% oxidant resulted in the highest Au concentration among all leaching tests.