

199.

$$12. E = \varphi_+ - \varphi_- = \frac{0.05917}{2} \lg x^2 - \frac{0.05917}{2} \lg (0.1)^2$$

$$\lg x^2 = -1.46$$

$$x =$$

200 17.

$$E^{\ominus} = \varphi(\text{正极}) - \varphi(\text{负极}) =$$

$$E^{\ominus} = \varphi(\text{MnO}_2/\text{Mn}^{2+}) - \varphi(\text{Cl}^-/\text{Cl}_2) = 1.10\text{V} - 0.134\text{V}$$

反应自逆反应方向进行

通过加大 Cl^- 浓度(采用浓盐酸), 并加热, 制备 Cl_2

$$23. E^{\ominus}(\text{AgBr}/\text{Ag}) = E^{\ominus}(\text{Ag}^+/\text{Ag}) + 0.0592\text{V} \times \lg K_{\text{sp}}^{\ominus}(\text{AgBr})$$

$$\lg K_{\text{sp}}^{\ominus}(\text{AgBr}) = -12.27$$

$$K_{\text{sp}}^{\ominus}(\text{AgBr}) =$$