

Tavola dei potenziali standard di riduzione in ordine alfabetico per elemento

(espressi in Volt, a 25°C, 101 Kpa, 1M)

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|---|-------|
| Afnio | |
| Hf ⁴⁺ + 4e ⁻ <---> Hf | -1,70 |
| HfO ²⁺ + 2H ⁺ + 2e ⁻ <---> Hf + H ₂ O | -1,72 |
| HfO ₂ + 4H ⁺ + 4e ⁻ <---> Hf + 2H ₂ O | -1,50 |
| HfO(OH) ₂ + 4H ⁺ + 4e ⁻ <---> Hf + 3H ₂ O | -1,68 |
| HfO(OH) ₂ + H ₂ O + 4e ⁻ <---> Hf + 4OH ⁻ | -2,51 |
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| Alluminio | |
| Al ³⁺ + 3e ⁻ <---> Al | -1,66 |
| Al(OH) ₃ + 3e ⁻ <---> Al + 3OH ⁻ | -2,30 |
| Al ₂ O ₃ + 6H ⁺ + 6e ⁻ <---> 2Al + 3H ₂ O | -1,49 |
| Al(OH) ₃ + 3H ⁺ + 3e ⁻ <---> Al + 3H ₂ O | -1,47 |
| AlF ₆ ²⁻ + 3e ⁻ <---> Al + 6F ⁻ | -2,07 |
| Al(OH) ₄ ⁻ + 3e ⁻ <---> Al + 4OH ⁻ | -2,33 |
| H ₂ AlO ₃ ⁻ + H ₂ O + 3e ⁻ <---> Al + 4OH ⁻ | -2,33 |
| | |
| Americio | |
| Am ³⁺ + 3e ⁻ <---> Am | -2,32 |
| Am ⁴⁺ + e ⁻ <---> Am ³⁺ | 2,18 |
| Am ₂ O ₃ + 6H ⁺ + 6e ⁻ <---> 2Am + 3H ₂ O | -1,68 |
| AmO ₂ + 4H ⁺ + e ⁻ <---> Am ³⁺ + 2H ₂ O | +1,86 |
| AmO ₂ ⁺ + 4H ⁺ + 2e ⁻ <---> Am ³⁺ + 2H ₂ O | +1,72 |
| Am ₂ ²⁺ + 4H ⁺ + 3e ⁻ <---> Am ³⁺ + 2H ₂ O | +1,69 |
| Am(OH) ₃ + 3H ⁺ + 3e ⁻ <---> Am + 3H ₂ O | -1,88 |
| Am(OH) ₄ + 4H ⁺ + e ⁻ <---> Am ³⁺ + 4H ₂ O | +1,75 |
| AmO ₂ OH + 5H ⁺ + 2e ⁻ <---> Am ³⁺ + 3H ₂ O | +1,64 |
| AmO ₂ (OH) ₂ + H ⁺ + e ⁻ <---> AmO ₂ OH + H ₂ O | +1,93 |
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| Antimonio | |
| Sb ⁵⁺ + 2e ⁻ <---> Sb ³⁺ | +0,75 |
| HSbO ₂ + 3H ⁺ + 3e ⁻ <---> Sb + 2H ₂ O | +0,23 |
| SbO ₂ ⁻ + 2H ₂ O + 3e ⁻ <---> Sb + 4OH ⁻ | -0,66 |
| Sb ₂ O ₃ + 6H ⁺ + 6e ⁻ <---> 2Sb + 3H ₂ O | +0,15 |
| SbO ₃ ⁻ + 6H ⁺ + 5e ⁻ <---> Sb + 3H ₂ O | +0,41 |
| Sb ₂ O ₅ + 4H ⁺ + 4e ⁻ <---> Sb ₂ O ₃ + 2H ₂ O | +0,67 |
| Sb + 3H ⁺ + 3e ⁻ <---> SbH ₃ | -0,51 |
| Sb(Cl) ₄ ⁻ + 3e ⁻ <---> Sb + 4Cl ⁻ | +0,17 |

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| Argento | |
| $\text{Ag}^+ + \text{e}^- \longleftrightarrow \text{Ag}$ Errore. L'origine riferimento non è stata trovata. | +0,80 |
| $\text{Ag}^{2+} + 2\text{e}^- \longleftrightarrow \text{Ag}$ | +1,39 |
| $\text{AgO} + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{Ag} + \text{H}_2\text{O}$ | +1,28 |
| $\text{AgO}^- + 2\text{H}^+ + \text{e}^- \longleftrightarrow \text{Ag} + \text{H}_2\text{O}$ | +2,22 |
| $\text{Ag}_2\text{O} + \text{H}_2\text{O} + 2\text{e}^- \longleftrightarrow 2\text{Ag} + 2\text{OH}^-$ | +0,34 |
| $\text{Ag}_2\text{O}_3 + \text{H}_2\text{O} + 2\text{e}^- \longleftrightarrow 2\text{AgO} + 2\text{OH}^-$ | +0,80 |
| $\text{AgCN} + \text{e}^- \longleftrightarrow \text{Ag} + \text{CN}^-$ | -0,02 |
| | |
| Arsenico | |
| $\text{As}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \longleftrightarrow 2\text{As} + 3\text{H}_2\text{O}$ | +0,23 |
| $\text{As}_2\text{O}_5 + 10\text{H}^+ + 10\text{e}^- \longleftrightarrow 2\text{As} + 5 \text{H}_2\text{O}$ | +0,43 |
| $\text{HAsO}_2^- + 3\text{H}^+ + 3\text{e}^- \longleftrightarrow \text{As} + 2\text{H}_2\text{O}$ | +0,25 |
| $\text{AsO}_2^- + 4\text{H}^+ + 3\text{e}^- \longleftrightarrow \text{As} + 2\text{H}_2\text{O}$ | +0,43 |
| $\text{AsO}_2^- + 2\text{H}_2\text{O} + 3\text{e}^- \longleftrightarrow \text{As} + 4\text{OH}^-$ | -0,67 |
| $\text{H}_3\text{AsO}_4 + 5\text{H}^+ + 5\text{e}^- \longleftrightarrow \text{As} + 4\text{H}_2\text{O}$ | +0,37 |
| $\text{AsO}_4^{3-} + 8\text{H}^+ + 5\text{e}^- \longleftrightarrow \text{As} + 4\text{H}_2\text{O}$ | +0,65 |
| $\text{AsO}_4^{3-} + 2\text{H}_2\text{O} + 2\text{e}^- \longleftrightarrow \text{AsO}_2^- + 2\text{OH}^-$ | -0,71 |
| $\text{HAsO}_4^{2-} + 7\text{H}^+ + 5\text{e}^- \longleftrightarrow \text{As} + 4\text{H}_2\text{O}$ | +0,50 |
| $\text{H}_2\text{AsO}_4^- + 6\text{H}^+ + 5\text{e}^- \longleftrightarrow \text{As} + 4\text{H}_2\text{O}$ | +0,41 |
| $\text{As} + 3\text{H}^+ + 3\text{e}^- \longleftrightarrow \text{AsH}_3$ | -0,61 |
| | |
| Astato | |
| $\text{At}_2 + 2\text{e}^- \longleftrightarrow 2\text{At}^-$ | +0,20 |
| $2\text{HAtO} + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{At}_2 + 2\text{H}_2\text{O}$ | +0,70 |
| $2\text{AtO}^- + 2\text{H}_2\text{O} + 2\text{e}^- \longleftrightarrow \text{At}_2 + 2\text{OH}^-$ | +0,00 |
| $\text{AtO}_3^- + 2\text{H}_2\text{O} + 4\text{e}^- \longleftrightarrow \text{AtO}^- + 4\text{OH}^-$ | +0,50 |
| $\text{HAtO}_3 + 4\text{H}^+ + 4\text{e}^- \longleftrightarrow \text{HAtO} + 2\text{H}_2\text{O}$ | +1,40 |
| | |
| Attinio | |
| $\text{Ac}^{3+} + 3\text{e}^- \longleftrightarrow \text{Ac}$ | -2,60 |
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|---|-------|
| Azoto | |
| $2\text{NO} + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{N}_2 + 2\text{H}_2\text{O}$ | +1,68 |
| $\text{N}_2\text{O} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{N}_2 + \text{H}_2\text{O}$ | +1,77 |
| $2\text{NO}_2 + 8\text{H}^+ + 8\text{e}^- \rightleftharpoons \text{N}_2 + 4\text{H}_2\text{O}$ | +1,36 |
| $3\text{N}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{HN}_3(\text{g})$ | -3,40 |
| $2\text{HNO}_2 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons \text{N}_2 + 4\text{H}_2\text{O}$ | +1,45 |
| $2\text{HNO}_3 + 10\text{H}^+ + 10\text{e}^- \rightleftharpoons \text{N}_2 + 6\text{H}_2\text{O}$ | +1,25 |
| $2\text{NO}_3^- + 12\text{H}^+ + 10\text{e}^- \rightleftharpoons \text{N}_2 + 6\text{H}_2\text{O}$ | +1,25 |
| $2\text{NO}_3^- + 6\text{H}_2\text{O} + 10\text{e}^- \rightleftharpoons \text{N}_2 + 12\text{OH}^-$ | +0,25 |
| $\text{N}_2\text{O}_4 + 8\text{H}^+ + 8\text{e}^- \rightleftharpoons \text{N}_2 + 4\text{H}_2\text{O}$ | +1,36 |
| $\text{N}_2 + 8\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{NH}_4^+$ | +0,28 |
| $\text{N}_2 + 8\text{H}_2\text{O} + 6\text{e}^- \rightleftharpoons 2\text{NH}_4\text{OH} + 6\text{OH}^-$ | -0,74 |
| $\text{N}_2 + 2\text{H}_2\text{O} + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{NH}_4\text{OH}$ | +0,09 |
| $2\text{NO}_2^- + 4\text{H}_2\text{O} + 6\text{e}^- \rightleftharpoons \text{N}_2 + 8\text{OH}^-$ | +0,42 |
| $2\text{NO}_2^- + 8\text{H}^+ + 6\text{e}^- \rightleftharpoons \text{N}_2 + 4\text{H}_2\text{O}$ | +1,52 |
| $\text{N}_2 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{NH}_3(\text{g})$ | +0,06 |
| $3\text{N}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{HN}_3(\text{aq})$ | -3,09 |
| $\text{CNO}^- + \text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons \text{CN}^- + 2\text{OH}^-$ | -0,97 |
| $\text{HCNO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{HCN} + \text{H}_2\text{O}$ | +0,02 |
| | |
| Bario | |
| $\text{Ba}^{2+} + 2\text{e}^- \rightleftharpoons \text{Ba}$ | -2,91 |
| $\text{Ba}(\text{OH})_2 + 2\text{e}^- \rightleftharpoons \text{Ba} + 2\text{OH}^-$ | -2,81 |
| $\text{BaO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ba} + \text{H}_2\text{O}$ | -1,51 |
| $\text{Ba} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{BaH}_2$ | +0,69 |
| $\text{Ba}^{2+} + 2\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{BaH}_2$ | -1,11 |
| $\text{BaO}_2 + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ba}^{2+} + 2\text{H}_2\text{O}$ | +2,42 |
| $\text{BaOH}^+ + 2\text{e}^- \rightleftharpoons \text{Ba} + \text{OH}^-$ | -2,94 |
| | |
| Berillio | |
| $\text{Be}^{2+} + 2\text{e}^- \rightleftharpoons \text{Be}$ | -1,85 |
| $\text{BeO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Be} + \text{H}_2\text{O}$ | -1,79 |
| $\text{BeO} + \text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons \text{Be} + 2\text{OH}^-$ | -2,61 |
| $\text{BeO}_2^{2-} + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Be} + 2\text{H}_2\text{O}$ | -0,91 |
| $\text{Be}_2\text{O}_3^{2-} + 6\text{H}^+ + 4\text{e}^- \rightleftharpoons 2\text{Be} + 3\text{H}_2\text{O}$ | -1,39 |
| $\text{Be}_2\text{O}_3^{2-} + 3\text{H}_2\text{O} + 4\text{e}^- \rightleftharpoons 2\text{Be} + 6\text{OH}^-$ | -2,63 |
| | |
| Berkelio | |
| $\text{Bk}^{3+} + 3\text{e}^- \rightleftharpoons \text{Bk}$ | -2,40 |
| $\text{Bk}^{4+} + \text{e}^- \rightleftharpoons \text{Bk}^{3+}$ | +1,60 |
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| Bismuto | |
| $\text{Bi}^{3+} + 3\text{e}^- \rightleftharpoons \text{Bi}$ | +0,29 |
| $\text{Bi}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Bi} + 3\text{H}_2\text{O}$ | +0,37 |
| $\text{Bi}_2\text{O}_3 + 3\text{H}_2\text{O} + 6\text{e}^- \rightleftharpoons 2\text{Bi} + 6\text{OH}^-$ | -0,46 |
| $\text{Bi}_2\text{O}_4 + 8\text{H}^+ + 8\text{e}^- \rightleftharpoons 2\text{Bi} + 4\text{H}_2\text{O}$ | +0,64 |
| $\text{Bi}_2\text{O}_4 + 8\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{Bi}^{3+} + 4\text{H}_2\text{O}$ | +1,91 |
| $\text{Bi}_2\text{O}_5 + 10\text{H}^+ + 10\text{e}^- \rightleftharpoons 2\text{Bi} + 5\text{H}_2\text{O}$ | +0,83 |
| $\text{Bi}(\text{OH})_3 + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Bi} + 3\text{H}_2\text{O}$ | +0,48 |
| $\text{Bi} + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{BiH}_3$ | -0,80 |
| $\text{Bi}(\text{Cl})_4^- + 3\text{e}^- \rightleftharpoons \text{Bi} + 4\text{Cl}^-$ | +0,16 |
| $\text{BiO}^+ + 2\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Bi} + \text{H}_2\text{O}$ | +0,32 |
| $\text{BiOH}^{2+} + \text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Bi} + \text{H}_2\text{O}$ | +0,25 |
| | |
| Boro | |
| $\text{B}^{3+} + 3\text{e}^- \rightleftharpoons \text{B}$ | -0,73 |
| $\text{B}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{B} + 3\text{H}_2\text{O}$ | -0,84 |
| $\text{BO}_{(g)} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{B} + \text{H}_2\text{O}$ | +0,81 |
| $\text{H}_3\text{BO}_{3(s)} + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{B} + 3\text{H}_2\text{O}$ | -0,87 |
| $\text{H}_2\text{BO}_3^- + \text{H}_2\text{O} + 3\text{e}^- \rightleftharpoons \text{B} + 4\text{OH}^-$ | -1,79 |
| $\text{H}_2\text{BO}_3^- + 4\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{B} + 3\text{H}_2\text{O}$ | -0,69 |
| $\text{HBO}_3^- + 5\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{B} + 3\text{H}_2\text{O}$ | -0,44 |
| $\text{BO}_3^{3-} + 6\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{B} + 3\text{H}_2\text{O}$ | -0,17 |
| $2\text{BO}_3^{3-} + 18\text{H}^+ + 12\text{e}^- \rightleftharpoons \text{B}_2\text{H}_6 + 6\text{H}_2\text{O}$ | -0,15 |
| $\text{B}_4\text{O}_7^{2-} + 14\text{H}^+ + 12\text{e}^- \rightleftharpoons 4\text{B} + 7\text{H}_2\text{O}$ | -0,79 |
| $\text{HB}_4\text{O}_7^- + 25\text{H}^+ + 24\text{e}^- \rightleftharpoons 2\text{B}_2\text{H}_6 + 7\text{H}_2\text{O}$ | -0,49 |
| $5\text{B} + 9\text{H}^+ + 9\text{e}^- \rightleftharpoons \text{B}_5\text{H}_9$ | -0,19 |
| $10\text{B} + 14\text{H}^+ + 14\text{e}^- \rightleftharpoons \text{B}_{10}\text{H}_{14(g)}$ | -0,22 |
| $\text{H}_3\text{BO}_{3(aq)} + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{B} + 3\text{H}_2\text{O}$ | -0,87 |
| $10\text{B} + 14\text{H}^+ + 14\text{e}^- \rightleftharpoons \text{B}_{10}\text{H}_{14(s)}$ | -0,20 |
| | |
| Bromo | |
| $\text{Br}_{2(l)} + 2\text{e}^- \rightleftharpoons 2\text{Br}^-$ | +1,07 |
| $\text{Br}_{2(aq)} + 2\text{e}^- \rightleftharpoons 2\text{Br}^-$ | +1,09 |
| $2\text{HBrO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Br}_{2(l)} + 2\text{H}_2\text{O}$ | +1,60 |
| $2\text{BrO}^- + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Br}_{2(l)} + 2\text{H}_2\text{O}$ | +2,11 |
| $2\text{HBrO}_3 + 10\text{H}^+ + 10\text{e}^- \rightleftharpoons \text{Br}_{2(l)} + 6\text{H}_2\text{O}$ | +1,49 |
| $2\text{BrO}_3^- + 12\text{H}^+ + 10\text{e}^- \rightleftharpoons \text{Br}_{2(l)} + 6\text{H}_2\text{O}$ | +1,50 |
| $\text{BrO}_3^- + 3\text{H}_2\text{O} + 6\text{e}^- \rightleftharpoons \text{Br}^- + 6\text{OH}^-$ | +0,61 |
| $3\text{Br}_{2(l)} + 2\text{e}^- \rightleftharpoons 2\text{Br}_3^-$ | +1,10 |
| $5\text{Br}_{2(l)} + 2\text{e}^- \rightleftharpoons 2\text{Br}_5^-$ | +1,06 |
| $\text{BrO}^- + \text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons \text{Br}^- + 2\text{OH}^-$ | +0,76 |
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|---|-------|
| Cadmio | |
| $\text{Cd}^{2+} + 2\text{e}^- \rightleftharpoons \text{Cd}$ | -0,40 |
| $\text{CdO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Cd} + \text{H}_2\text{O}$ | +0,06 |
| $\text{Cd(OH)}_2 + 2\text{e}^- \rightleftharpoons \text{Cd} + 2\text{OH}^-$ | -0,81 |
| $\text{HCdO}_2^- + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Cd} + 2\text{H}_2\text{O}$ | +0,58 |
| $\text{Cd} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{CdH}$ | -2,42 |
| | |
| Calcio | |
| $\text{Ca}^{2+} + 2\text{e}^- \rightleftharpoons \text{Ca}$ | -2,87 |
| $\text{Ca}^+ + \text{e}^- \rightleftharpoons \text{Ca}$ | -3,80 |
| $\text{Ca} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{CaH}_2$ | +0,78 |
| $\text{Ca(OH)}_2 + 2\text{e}^- \rightleftharpoons \text{Ca} + 2\text{OH}^-$ | -3,02 |
| $\text{Ca(OH)}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{CaH}_2 + 2\text{H}_2\text{O}$ | -0,71 |
| $\text{CaO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ca} + \text{H}_2\text{O}$ | -1,90 |
| $\text{CaO}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{CaO} + \text{H}_2\text{O}$ | -1,26 |
| $\text{CaOH}^+ + 2\text{e}^- \rightleftharpoons \text{Ca} + \text{OH}^-$ | -2,91 |
| | |
| Californio | |
| $\text{Cf}^{3+} + 3\text{e}^- \rightleftharpoons \text{Cf}$ | -2,10 |
| | |
| Carbonio | |
| $\text{CO}_{(\text{g})} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{C} + \text{H}_2\text{O}$ | +0,52 |
| $\text{CO}_{2(\text{g})} + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{C} + \text{H}_2\text{O}$ | +0,21 |
| $\text{CO}_3^{2-} + 6\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{C} + 3\text{H}_2\text{O}$ | +0,48 |
| $\text{CO}_3^{2-} + 3\text{H}_2\text{O} + 4\text{e}^- \rightleftharpoons \text{C} + 6\text{OH}^-$ | -0,77 |
| $\text{HCO}_3^- + 5\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{C} + 3\text{H}_2\text{O}$ | +0,32 |
| $\text{H}_2\text{CO}_3 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{C} + 3\text{H}_2\text{O}$ | +0,23 |
| $\text{HCOOH} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{C} + 2\text{H}_2\text{O}$ | +0,63 |
| $\text{HCOO}^- + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{C} + 2\text{H}_2\text{O}$ | +0,72 |
| $\text{C} + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{CH}_4$ | -0,13 |
| | |
| Cerio | |
| $\text{Ce}^{3+} + 3\text{e}^- \rightleftharpoons \text{Ce}$ | -2,48 |
| $\text{Ce}^{4+} + \text{e}^- \rightleftharpoons \text{Ce}^{3+}$ | +1,61 |
| $\text{Ce(OH)}_3 + 3\text{e}^- \rightleftharpoons \text{Ce} + 3\text{OH}^-$ | -2,87 |
| $\text{Ce}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Ce} + 3\text{H}_2\text{O}$ | +2,05 |
| $2\text{CeO}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ce}_2\text{O}_3 + \text{H}_2\text{O}$ | +1,56 |
| $\text{CeOH}^{3+} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{Ce}^{3+} + \text{H}_2\text{O}$ | +1,71 |
| $\text{Ce(OH)}_2^{2+} + 2\text{H}^+ + \text{e}^- \rightleftharpoons \text{Ce}^{3+} + 2\text{H}_2\text{O}$ | +1,73 |
| | |
| Cesio | |
| $\text{Cs}^+ + \text{e}^- \rightleftharpoons \text{Cs}$ | -2,92 |
| | |

| | |
|---|-------|
| Cloro | |
| $\text{Cl}_2 + 2\text{e}^- \longleftrightarrow 2\text{Cl}^-$ | +1,36 |
| $2\text{HClO} + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{Cl}_2 + 2\text{H}_2\text{O}$ | +1,63 |
| $2\text{ClO}^- + 4\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{Cl}_2 + 2\text{H}_2\text{O}$ | +2,07 |
| $\text{Cl}_2\text{O} + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{Cl}_2 + \text{H}_2\text{O}$ | +1,71 |
| $2\text{HClO}_2 + 6\text{H}^+ + 6\text{e}^- \longleftrightarrow \text{Cl}_2 + 4\text{H}_2\text{O}$ | +1,64 |
| $2\text{ClO}_2^- + 8\text{H}^+ + 6\text{e}^- \longleftrightarrow \text{Cl}_2 + 4\text{H}_2\text{O}$ | +1,68 |
| $2\text{ClO}_3^- + 12\text{H}^+ + 10\text{e}^- \longleftrightarrow \text{Cl}_2 + 6\text{H}_2\text{O}$ | +1,47 |
| $\text{ClO}_3^- + 3\text{H}_2\text{O} + 6\text{e}^- \longleftrightarrow \text{Cl}^- + 6\text{OH}^-$ | +0,62 |
| $2\text{ClO}_4^- + 16\text{H}^+ + 14\text{e}^- \longleftrightarrow \text{Cl}_2 + 8\text{H}_2\text{O}$ | +1,39 |
| $\text{ClO}_4^- + \text{H}_2\text{O} + 2\text{e}^- \longleftrightarrow \text{ClO}_3^- + 2\text{OH}^-$ | +0,36 |
| $\text{Cl}_2 + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow 2\text{HCl}_{(\text{g})}$ | +0,99 |
| $2\text{ClO}_2 + 8\text{H}^+ + 8\text{e}^- \longleftrightarrow \text{Cl}_2 + 4\text{H}_2\text{O}$ | +1,55 |
| | |
| Cobalto | |
| $\text{Co}^{2+} + 2\text{e}^- \longleftrightarrow \text{Co}$ | -0,28 |
| $\text{Co}^{3+} + \text{e}^- \longleftrightarrow \text{Co}^{2+}$ | +1,81 |
| $\text{Co}(\text{OH})_2 + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{Co} + 2\text{H}_2\text{O}$ | +0,10 |
| $\text{Co}(\text{OH})_2 + 2\text{e}^- \longleftrightarrow \text{Co} + 2\text{OH}^-$ | -0,73 |
| $\text{Co}_3\text{O}_4 + 8\text{H}^+ + 2\text{e}^- \longleftrightarrow 3\text{Co}^{2+} + 4\text{H}_2\text{O}$ | +2,11 |
| $\text{Co}_2\text{O}_3 + 6\text{H}^+ + 2\text{e}^- \longleftrightarrow 2\text{Co}^{2+} + 3\text{H}_2\text{O}$ | +1,75 |
| $\text{CoO}_2 + 4\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{Co}^{2+} + 2\text{H}_2\text{O}$ | +1,61 |
| $\text{Co}_2\text{O}_3 + \text{H}_2\text{O} + 2\text{e}^- \longleftrightarrow 2\text{HCoO}_2^-$ | -0,13 |
| $\text{CoO} + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{Co} + \text{H}_2\text{O}$ | +0,17 |
| | |
| Cromo | |
| $\text{Cr}^{3+} + 3\text{e}^- \longleftrightarrow \text{Cr}$ | -0,74 |
| $\text{Cr}^{3+} + \text{e}^- \longleftrightarrow \text{Cr}^{2+}$ | -0,41 |
| $\text{CrO} + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{Cr} + \text{H}_2\text{O}$ | -0,59 |
| $\text{Cr}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \longleftrightarrow 2\text{Cr} + 3\text{H}_2\text{O}$ | -0,58 |
| $2\text{CrO}_2 + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{Cr}_2\text{O}_3 + \text{H}_2\text{O}$ | +1,06 |
| $\text{Cr}(\text{OH})_3 + 3\text{H}^+ + 3\text{e}^- \longleftrightarrow \text{Cr} + 3\text{H}_2\text{O}$ | -0,65 |
| $\text{Cr}(\text{OH})_3 + 3\text{e}^- \longleftrightarrow \text{Cr} + 3\text{OH}^-$ | -1,48 |
| $\text{H}_2\text{CrO}_4 + 6\text{H}^+ + 6\text{e}^- \longleftrightarrow \text{Cr} + 4\text{H}_2\text{O}$ | +0,30 |
| $\text{HCrO}_4^- + 7\text{H}^+ + 6\text{e}^- \longleftrightarrow \text{Cr} + 4\text{H}_2\text{O}$ | +0,30 |
| $\text{CrO}_4^{2-} + 8\text{H}^+ + 6\text{e}^- \longleftrightarrow \text{Cr} + 4\text{H}_2\text{O}$ | +0,37 |
| $\text{CrO}_2^- + 4\text{H}^+ + 3\text{e}^- \longleftrightarrow \text{Cr} + 2\text{H}_2\text{O}$ | -0,21 |
| $\text{CrO}_3^{3-} + 6\text{H}^+ + 3\text{e}^- \longleftrightarrow \text{Cr} + 3\text{H}_2\text{O}$ | +0,37 |
| $\text{Cr}_2\text{O}_7^{2-} + 14\text{H}^+ + 12\text{e}^- \longleftrightarrow 2\text{Cr} + 7\text{H}_2\text{O}$ | +0,29 |
| | |
| Curio | |
| $\text{Cm}^{3+} + 3\text{e}^- \longleftrightarrow \text{Cm}$ | -2,70 |
| | |
| Disprosio | |
| $\text{Dy}^{3+} + 3\text{e}^- \longleftrightarrow \text{Dy}$ | -2,35 |
| $\text{Dy}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \longleftrightarrow 2\text{Dy} + 3\text{H}_2\text{O}$ | -1,96 |
| $\text{Dy}(\text{OH})_3 + 3\text{e}^- \longleftrightarrow \text{Dy} + 3\text{OH}^-$ | -2,78 |

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|---|-------|
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| Erbio | |
| $\text{Er}^{3+} + 3\text{e}^- \rightleftharpoons \text{Er}$ | -2,30 |
| $\text{Er}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Er} + 3\text{H}_2\text{O}$ | -1,92 |
| $\text{Er(OH)}_3 + 3\text{e}^- \rightleftharpoons \text{Er} + 3\text{OH}^-$ | -2,75 |
| | |
| Europio | |
| $\text{Eu}^{3+} + 3\text{e}^- \rightleftharpoons \text{Eu}$ | -2,41 |
| $\text{Eu}^{2+} + 2\text{e}^- \rightleftharpoons \text{Eu}$ | -3,40 |
| $\text{Eu}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Eu} + 3\text{H}_2\text{O}$ | -2,00 |
| $\text{Eu(OH)}_3 + 3\text{e}^- \rightleftharpoons \text{Eu} + 3\text{OH}^-$ | -2,83 |
| | |
| Fermio | |
| $\text{Fm}^{3+} + 3\text{e}^- \rightleftharpoons \text{Fm}$ | -2,10 |
| | |
| Ferro | |
| $\text{Fe}^{2+} + 2\text{e}^- \rightleftharpoons \text{Fe}$ | -0,44 |
| $\text{Fe}^{3+} + \text{e}^- \rightleftharpoons \text{Fe}^{2+}$ | +0,77 |
| $\text{Fe}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Fe} + 3\text{H}_2\text{O}$ | -0,05 |
| $\text{Fe}_3\text{O}_4 + 8\text{H}^+ + 8\text{e}^- \rightleftharpoons 3\text{Fe} + 4\text{H}_2\text{O}$ | -0,09 |
| $\text{Fe}_3\text{O}_4 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 3\text{FeO} + \text{H}_2\text{O}$ | -0,20 |
| $\text{Fe(OH)}_3 + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Fe} + 3\text{H}_2\text{O}$ | +0,06 |
| $\text{Fe(OH)}_2 + 2\text{e}^- \rightleftharpoons \text{Fe} + 2\text{OH}^-$ | -0,88 |
| $\text{HFeO}_2^- + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Fe} + 2\text{H}_2\text{O}$ | +0,49 |
| $\text{FeOH}^{2+} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{Fe}^{2+} + \text{H}_2\text{O}$ | +0,91 |
| $\text{Fe(OH)}_2^+ + 2\text{H}^+ + \text{e}^- \rightleftharpoons \text{Fe}^{2+} + 2\text{H}_2\text{O}$ | +1,19 |
| $\text{Fe(OH)}_3 + \text{e}^- \rightleftharpoons \text{Fe(OH)}_2^+ + \text{OH}^-$ | -0,56 |
| $\text{FeO}_4^{2-} + 8\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Fe}^{3+} + 4\text{H}_2\text{O}$ | +2,20 |
| $\text{FeO}_4^{2-} + 4\text{H}_2\text{O} + 3\text{e}^- \rightleftharpoons \text{Fe(OH)}_3 + 5\text{OH}^-$ | +0,72 |
| | |
| Fluoro | |
| $\text{F}_2 + 2\text{e}^- \rightleftharpoons 2\text{F}^-$ | +2,87 |
| $\text{F}_2\text{O} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{F}_2 + \text{H}_2\text{O}$ | +1,44 |
| $\text{F}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{HF}_{(\text{g})}$ | +2,81 |
| $\text{F}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{HF}_{(\text{aq})}$ | +3,05 |
| $\text{F}_2 + \text{H}^+ + 2\text{e}^- \rightleftharpoons \text{HF}_2^-$ | +2,98 |
| | |
| Fosforo | |
| $\text{H}_3\text{PO}_4 + 5\text{H}^+ + 5\text{e}^- \rightleftharpoons \text{P} + 4\text{H}_2\text{O}$ | -0,41 |
| $\text{H}_2\text{PO}_4^- + 6\text{H}^+ + 5\text{e}^- \rightleftharpoons \text{P} + 4\text{H}_2\text{O}$ | -0,39 |
| $\text{HPO}_4^{2-} + 7\text{H}^+ + 5\text{e}^- \rightleftharpoons \text{P} + 4\text{H}_2\text{O}$ | -0,30 |
| $\text{PO}_4^{3-} + 8\text{H}^+ + 5\text{e}^- \rightleftharpoons \text{P} + 4\text{H}_2\text{O}$ | -0,16 |
| $\text{H}_3\text{PO}_3 + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{P} + 3\text{H}_2\text{O}$ | -0,50 |
| $\text{H}_2\text{PO}_3^- + 4\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{P} + 3\text{H}_2\text{O}$ | -0,47 |
| $\text{HPO}_3^{2-} + 5\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{P} + 3\text{H}_2\text{O}$ | -0,35 |
| $\text{H}_3\text{PO}_2 + \text{H}^+ + \text{e}^- \rightleftharpoons \text{P} + 2\text{H}_2\text{O}$ | -0,51 |
| $\text{H}_2\text{PO}_2^- + 2\text{H}^+ + \text{e}^- \rightleftharpoons \text{P} + 2\text{H}_2\text{O}$ | -0,39 |
| $\text{P} + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{PH}_3$ | -0,06 |

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| $\text{HPO}_3^{2-} + 2\text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons \text{H}_2\text{PO}_2^- + 3\text{OH}^-$ | -1,57 |
| $\text{H}_2\text{PO}_2^- + \text{e}^- \rightleftharpoons \text{P} + 2\text{OH}^-$ | -2,05 |
| | |
| Gadolino | |
| $\text{Gd}^{3+} + 3\text{e}^- \rightleftharpoons \text{Gd}$ | -2,40 |
| $\text{Gd}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Gd} + 3\text{H}_2\text{O}$ | -1,99 |
| $\text{Gd}(\text{OH})_3 + 3\text{e}^- \rightleftharpoons \text{Gd} + 3\text{OH}^-$ | -2,82 |
| | |
| Gallio | |
| $\text{Ga}^{3+} + 3\text{e}^- \rightleftharpoons \text{Ga}$ | -0,56 |
| $\text{Ga}^{3+} + \text{e}^- \rightleftharpoons \text{Ga}^{2+}$ | -0,68 |
| $\text{Ga}_2\text{O} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{Ga} + \text{H}_2\text{O}$ | -0,40 |
| $\text{Ga}(\text{OH})_3 + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Ga} + 3\text{H}_2\text{O}$ | -0,42 |
| $\text{Ga}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Ga} + 3\text{H}_2\text{O}$ | -0,49 |
| $\text{H}_2\text{GaO}_3^- + \text{H}_2\text{O} + 3\text{e}^- \rightleftharpoons \text{Ga} + 4\text{OH}^-$ | -1,22 |
| $\text{HGaO}_3^{2-} + 5\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Ga} + 3\text{H}_2\text{O}$ | +0,09 |
| $\text{GaO}_3^{3-} + 6\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Ga} + 3\text{H}_2\text{O}$ | +0,32 |
| $\text{GaO}_2^- + 4\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Ga} + 2\text{H}_2\text{O}$ | -0,11 |
| $\text{GaOH}^{2+} + \text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Ga} + \text{H}_2\text{O}$ | +0,48 |
| $\text{Ga}(\text{OH})_4^- + 3\text{e}^- \rightleftharpoons \text{Ga} + 4\text{OH}^-$ | -1,33 |
| $\text{GaO}^+ + 2\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Ga} + \text{H}_2\text{O}$ | -0,42 |
| | |
| Germanio | |
| $\text{Ge}^{2+} + 2\text{e}^- \rightleftharpoons \text{Ge}$ | +0,24 |
| $\text{Ge}^{4+} + 2\text{e}^- \rightleftharpoons \text{Ge}$ | +0,12 |
| $\text{GeO}_{(\text{Brown})} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ge} + \text{H}_2\text{O}$ | -0,29 |
| $\text{GeO}_{(\text{Yellow})} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ge} + \text{H}_2\text{O}$ | -0,13 |
| $\text{GeO}_2_{(\text{esag.})} + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Ge} + \text{H}_2\text{O}$ | -0,20 |
| $\text{GeO}_2_{(\text{tetrag.})} + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Ge} + \text{H}_2\text{O}$ | -0,25 |
| $\text{GeO}_3^{2-} + 6\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Ge} + 3\text{H}_2\text{O}$ | +0,13 |
| $\text{HGeO}_3^- + 5\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Ge} + 3\text{H}_2\text{O}$ | -0,06 |
| $\text{H}_2\text{GeO}_3 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Ge} + 3\text{H}_2\text{O}$ | -0,18 |
| $\text{Ge} + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{GeH}_4$ | -0,87 |
| | |
| Indio | |
| $\text{In}^{3+} + 3\text{e}^- \rightleftharpoons \text{In}$ | -0,34 |
| $\text{In}^{3+} + \text{e}^- \rightleftharpoons \text{In}^{2+}$ | -0,49 |
| $\text{In}^{2+} + \text{e}^- \rightleftharpoons \text{In}^+$ | -0,40 |
| $\text{In}^+ + \text{e}^- \rightleftharpoons \text{In}$ | -0,14 |
| $\text{In}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{In} + 3\text{H}_2\text{O}$ | -0,19 |
| $\text{In}(\text{OH})_3 + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{In} + 3\text{H}_2\text{O}$ | -0,17 |
| $\text{In}(\text{OH})_3 + 3\text{e}^- \rightleftharpoons \text{In} + 3\text{OH}^-$ | -1,00 |
| $\text{In} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{InH}$ | -1,95 |
| $\text{InOH}^{2+} + \text{H}^+ + 3\text{e}^- \rightleftharpoons \text{In} + \text{H}_2\text{O}$ | -0,27 |
| | |

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| Iodio | |
| $I_{2(s)} + 2e^- \rightleftharpoons 2I^-$ | +0,54 |
| $I_{2(g)} + 2e^- \rightleftharpoons 2I^-$ | +0,64 |
| $I_{2(aq)} + 2e^- \rightleftharpoons 2I^-$ | +0,62 |
| $I_{2(g)} + 2H^+ + 2e^- \rightleftharpoons 2HI$ | +0,09 |
| $2HIO + 2H^+ + 2e^- \rightleftharpoons I_{2(s)} + 2H_2O$ | +1,44 |
| $2IO^- + 4H^+ + 2e^- \rightleftharpoons I_{2(s)} + 2H_2O$ | +2,09 |
| $2HIO_3 + 10H^+ + 10e^- \rightleftharpoons I_{2(s)} + 6H_2O$ | +1,19 |
| $2IO_3^- + 12H^+ + 10e^- \rightleftharpoons I_{2(s)} + 6H_2O$ | +1,20 |
| $IO_3^- + 3H_2O + 6e^- \rightleftharpoons I^- + 6OH^-$ | +0,26 |
| $2HIO_4 + 14H^+ + 14e^- \rightleftharpoons I_{2(s)} + 8H_2O$ | +1,31 |
| $2IO_4^- + 16H^+ + 14e^- \rightleftharpoons I_{2(s)} + 8H_2O$ | +1,33 |
| $2HIO_5^{2-} + 18H^+ + 14e^- \rightleftharpoons I_{2(s)} + 10H_2O$ | +1,40 |
| $2IO_5^{3-} + 20H^+ + 14e^- \rightleftharpoons I_{2(s)} + 10H_2O$ | +1,49 |
| $2H_5IO_6 + 14H^+ + 14e^- \rightleftharpoons I_{2(s)} + 12H_2O$ | +1,31 |
| $H_3IO_6^{2-} + 2e^- \rightleftharpoons IO_3^- + 3OH^-$ | +0,70 |
| $2I^+ + 2e^- \rightleftharpoons I_{2(s)}$ | +1,36 |
| $3I_2 + 2e^- \rightleftharpoons 2I_3^-$ | +0,53 |
| Iridio | |
| $Ir^{3+} + 3e^- \rightleftharpoons Ir$ | +1,16 |
| $IrO + 2H^+ + 2e^- \rightleftharpoons Ir + H_2O$ | +0,87 |
| $IrO_2 + 4H^+ + 4e^- \rightleftharpoons Ir + 2H_2O$ | +0,93 |
| $Ir_2O_3 + 6H^+ + 6e^- \rightleftharpoons 2Ir + 3H_2O$ | +0,93 |
| $Ir_2O_3 + 3H_2O + 6e^- \rightleftharpoons 2Ir + 6OH^-$ | +0,10 |
| $IrO_4^{2-} + 8H^+ + 3e^- \rightleftharpoons Ir^{3+} + 4H_2O$ | +1,45 |
| $IrCl_6^{3-} + 3e^- \rightleftharpoons Ir + 6Cl^-$ | +0,77 |
| Itterbio | |
| $Yb^{3+} + 3e^- \rightleftharpoons Yb$ | -2,27 |
| $Yb^{2+} + 2e^- \rightleftharpoons Yb$ | -2,80 |
| $Yb_2O_3 + 6H^+ + 6e^- \rightleftharpoons 2Yb + 3H_2O$ | -1,90 |
| $Yb(OH)_3 + 3e^- \rightleftharpoons Yb + 3OH^-$ | -2,73 |
| Ittrio | |
| $Y^{3+} + 3e^- \rightleftharpoons Y$ | -2,37 |
| $Y_2O_3 + 6H^+ + 6e^- \rightleftharpoons 2Y + 3H_2O$ | -1,68 |
| $Y(OH)_3 + 3H^+ + 3e^- \rightleftharpoons Y + 3H_2O$ | -1,98 |
| $Y(OH)_3 + 3e^- \rightleftharpoons Y + 3OH^-$ | -2,81 |
| Lantano | |
| $La^{3+} + 3e^- \rightleftharpoons La$ | -2,52 |
| $La_2O_3 + 6H^+ + 6e^- \rightleftharpoons 2La + 3H_2O$ | -1,86 |
| $La(OH)_3 + 3H^+ + 3e^- \rightleftharpoons La + 3H_2O$ | -2,07 |
| $La(OH)_3 + 3e^- \rightleftharpoons La + 3OH^-$ | -2,90 |

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|---|--|-------|
| Litio | | |
| Li ⁺ + e ⁻ <---> Li | | -3,04 |
| Li + H ⁺ + e ⁻ <---> LiH | | +0,73 |
| Li ⁺ + H ⁺ + 2e ⁻ <---> LiH | | -1,16 |
| | | |
| Lutezio | | |
| Lu ³⁺ + 3e ⁻ <---> Lu | | -2,26 |
| Lu ₂ O ₃ + 6H ⁺ + 6e ⁻ <---> 2Lu + 3H ₂ O | | -1,89 |
| Lu(OH) ₃ + 3e ⁻ <---> Lu + 3OH ⁻ | | -2,72 |
| | | |
| Magnesio | | |
| Mg ²⁺ + 2e ⁻ <---> Mg | | -2,36 |
| Mg(OH) ₂ + 2e ⁻ <---> Mg + 2OH ⁻ | | -2,69 |
| MgOH ⁺ + 2e ⁻ <---> Mg + OH ⁻ | | -2,44 |
| | | |
| Manganese | | |
| Mn ²⁺ + 2e ⁻ <---> Mn | | -1,18 |
| Mn ³⁺ + e ⁻ <---> Mn ²⁺ | | +1,51 |
| Mn ⁴⁺ + 4e ⁻ <---> Mn | | +0,20 |
| MnO + 2H ⁺ + 2e ⁻ <---> Mn + H ₂ O | | -0,65 |
| Mn ₂ O ₃ + 6H ⁺ + 6e ⁻ <---> 2Mn + 3H ₂ O | | -0,31 |
| MnO ₂ + 4H ⁺ + 4e ⁻ <---> Mn + 2H ₂ O | | +0,02 |
| Mn ₃ O ₄ + 8H ⁺ + 8e ⁻ <---> 3Mn + 4H ₂ O | | -0,44 |
| Mn(OH) ₂ + 2H ⁺ + 2e ⁻ <---> Mn + 2H ₂ O | | -0,73 |
| Mn(OH) ₃ + 3H ⁺ + 3e ⁻ <---> Mn + 3H ₂ O | | -0,16 |
| Mn(OH) ₄ + 4H ⁺ + 4e ⁻ <---> Mn + 4H ₂ O | | +0,21 |
| MnOOH + 3H ⁺ + 3e ⁻ <---> Mn + 2H ₂ O | | -0,34 |
| MnO(OH) ₂ + 4H ⁺ + 4e ⁻ <---> Mn + 3H ₂ O | | +0,12 |
| HMnO ₂ ⁻ + 3H ⁺ + 2e ⁻ <---> Mn + 2H ₂ O | | -0,16 |
| MnO ₄ ⁻ + 8H ⁺ + 5e ⁻ <---> Mn ²⁺ + 4H ₂ O | | +1,51 |
| MnO ₄ ²⁻ + 5H ⁺ + 4e ⁻ <---> HMnO ₂ ⁻ + 2H ₂ O | | +1,23 |
| MnOH ⁺ + H ⁺ + 2e ⁻ <---> Mn + H ₂ O | | -0,87 |
| Mn(OH) ₂ + 2e ⁻ <---> Mn + 2OH ⁻ | | -1,56 |
| MnO ₂ + 2H ₂ O + 2e ⁻ <---> Mn(OH) ₂ + 2OH ⁻ | | -0,05 |
| Mn(OH) ₃ + e ⁻ <---> Mn(OH) ₂ + OH ⁻ | | +0,15 |
| MnO ₄ ⁻ + 2H ₂ O + 3e ⁻ <---> MnO ₂ + 4OH ⁻ | | +0,59 |
| MnO ₄ ⁻ + e ⁻ <---> MnO ₄ ²⁻ | | +0,56 |
| MnO ₄ ²⁻ + 2H ₂ O + 2e ⁻ <---> MnO ₂ + 4OH ⁻ | | +0,60 |
| | | |
| Mercurio | | |
| Hg ₂ ²⁺ + 2e ⁻ <---> 2Hg | | +0,79 |
| 2Hg ₂ ²⁺ + 2e ⁻ <---> Hg ₂ ²⁺ | | +0,92 |
| Hg ²⁺ + 2e ⁻ <---> Hg | | +0,85 |
| HgO + H ₂ O + 2e ⁻ <---> Hg + 2OH ⁻ | | +0,10 |
| HgO + 2H ⁺ + 2e ⁻ <---> Hg + H ₂ O | | +0,93 |
| Hg(OH) ₂ + 2H ⁺ + 2e ⁻ <---> Hg + 2H ₂ O | | +1,03 |
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|---|-------|
| Molibdeno | |
| $\text{Mo}^{3+} + 3\text{e}^- \rightleftharpoons \text{Mo}$ | -0,20 |
| $\text{MoO}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Mo} + 2\text{H}_2\text{O}$ | -0,07 |
| $\text{MoO}_3 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{MoO}_2 + \text{H}_2\text{O}$ | +0,32 |
| $\text{H}_2\text{MoO}_4 + 6\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Mo}^{3+} + 4\text{H}_2\text{O}$ | -0,62 |
| $\text{HMnO}_4^- + 7\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Mo}^{3+} + 4\text{H}_2\text{O}$ | +0,39 |
| $\text{MoO}_4^{2-} + 8\text{H}^+ + 6\text{e}^- \rightleftharpoons \text{Mo} + 4\text{H}_2\text{O}$ | +0,15 |
| | |
| Neodimio | |
| $\text{Nd}^{3+} + 3\text{e}^- \rightleftharpoons \text{Nd}$ | -2,43 |
| $\text{Nd(OH)}_3 + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Nd} + 3\text{H}_2\text{O}$ | -2,01 |
| $\text{Nd(OH)}_3 + 3\text{e}^- \rightleftharpoons \text{Nd} + 3\text{OH}^-$ | -2,84 |
| $\text{Nd}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Nd} + 3\text{H}_2\text{O}$ | -1,81 |
| | |
| Nettunio | |
| $\text{Np}^{3+} + 3\text{e}^- \rightleftharpoons \text{Np}$ | -1,86 |
| $\text{Np}^{4+} + \text{e}^- \rightleftharpoons \text{Np}^{3+}$ | +0,15 |
| $\text{NpO}_2^+ + 4\text{H}^+ + \text{e}^- \rightleftharpoons \text{Np}^{4+} + 2\text{H}_2\text{O}$ | +0,75 |
| $\text{Np(OH)}_3 + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Np} + 3\text{H}_2\text{O}$ | -1,42 |
| $\text{NpO}_2^{2+} + \text{e}^- \rightleftharpoons \text{NpO}_2^+$ | +1,13 |
| $\text{NpO}_2 + \text{H}_2\text{O} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{Np(OH)}_3$ | -0,96 |
| $\text{NpO}_2\text{OH} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{NpO}_2^+ + \text{H}_2\text{O}$ | +1,25 |
| $\text{Np(OH)}_4 + \text{H}^+ + \text{e}^- \rightleftharpoons \text{Np(OH)}_3 + \text{H}_2\text{O}$ | -0,93 |
| $\text{NpO}_2(\text{OH})_2 + \text{H}^+ + \text{e}^- \rightleftharpoons \text{NpO}_2\text{OH} + \text{H}_2\text{O}$ | +1,13 |
| | |
| Nichel | |
| $\text{Ni}^{2+} + 2\text{e}^- \rightleftharpoons \text{Ni}$ | -0,26 |
| $\text{NiO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ni} + \text{H}_2\text{O}$ | +0,12 |
| $\text{Ni(OH)}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ni} + 2\text{H}_2\text{O}$ | +0,11 |
| $\text{Ni(OH)}_2 + 2\text{e}^- \rightleftharpoons \text{Ni} + 2\text{OH}^-$ | -0,72 |
| $\text{Ni}_2\text{O}_3 + 6\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{Ni}^{2+} + 3\text{H}_2\text{O}$ | +1,75 |
| $\text{Ni}_3\text{O}_4 + 8\text{H}^+ + 2\text{e}^- \rightleftharpoons 3\text{Ni}^{2+} + 4\text{H}_2\text{O}$ | +1,98 |
| $\text{HNiO}_2^- + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ni} + 2\text{H}_2\text{O}$ | +0,65 |
| | |
| Niobio | |
| $\text{Nb}^{3+} + 3\text{e}^- \rightleftharpoons \text{Nb}$ | -1,10 |
| $\text{NbO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Nb} + \text{H}_2\text{O}$ | -0,73 |
| $\text{Nb}_2\text{O}_5 + 10\text{H}^+ + 10\text{e}^- \rightleftharpoons 2\text{Nb} + 5\text{H}_2\text{O}$ | -0,64 |
| $\text{NbO}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{NbO} + \text{H}_2\text{O}$ | -0,63 |
| | |
| Nobelio | |
| $\text{No}^{3+} + 3\text{e}^- \rightleftharpoons \text{No}$ | -2,50 |
| | |
| Olimio | |
| $\text{Ho}^{3+} + 3\text{e}^- \rightleftharpoons \text{Ho}$ | -2,32 |
| $\text{Ho}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Ho} + 3\text{H}_2\text{O}$ | -1,94 |
| $\text{Ho(OH)}_3 + 3\text{e}^- \rightleftharpoons \text{Ho} + 3\text{OH}^-$ | -2,77 |

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|---|-------|
| Oro | |
| $\text{Au}^+ + \text{e}^- \rightleftharpoons \text{Au}$ | +1,69 |
| $\text{Au}^{3+} + 3\text{e}^- \rightleftharpoons \text{Au}$ | +1,50 |
| $\text{AuO}_2 + 4\text{H}^+ + \text{e}^- \rightleftharpoons \text{Au}^{3+} + 2\text{H}_2\text{O}$ | +2,51 |
| $2\text{AuO}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Au}_{2\text{O}}^{3(\alpha)} + \text{H}_2\text{O}$ | +2,63 |
| $2\text{AuO}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Au}_{2\text{O}}^{3(\beta)} + \text{H}_2\text{O}$ | +2,47 |
| $\text{AuO}_2 + \text{H}_2\text{O} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{Au(OH)}_3$ | +2,31 |
| $\text{H}_2\text{AuO}_2^- + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Au}^+ + 3\text{H}_2\text{O}$ | +1,85 |
| $\text{HAuO}_3^{2-} + 5\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Au}^+ + 3\text{H}_2\text{O}$ | +2,24 |
| Osmio | |
| $\text{H}_2\text{OsO}_5 + 8\text{H}^+ + 8\text{e}^- \rightleftharpoons \text{Os} + 5\text{H}_2\text{O}$ | +0,85 |
| $\text{OsO}_4^{2-} + 8\text{H}^+ + 6\text{e}^- \rightleftharpoons \text{Os} + 4\text{H}_2\text{O}$ | +0,99 |
| $\text{OsO}_{4(\text{s})} + 2\text{e}^- \rightleftharpoons \text{OsO}_4^{2-}$ | +0,40 |
| $\text{OsO}_{4(\text{g})} + 2\text{e}^- \rightleftharpoons \text{OsO}_4^{2-}$ | +0,46 |
| $\text{OsO}_4^{2-} + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{OsO}_2 + 2\text{H}_2\text{O}$ | +1,61 |
| $\text{HOsO}_5^- + \text{H}^+ + 2\text{e}^- \rightleftharpoons \text{OsO}_4^{2-} + \text{H}_2\text{O}$ | +0,71 |
| $\text{OsO}_5^{2-} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{OsO}_4^{2-} + \text{H}_2\text{O}$ | +1,14 |
| $\text{Os(OH)}_4 + 4\text{e}^- \rightleftharpoons \text{Os} + 4\text{OH}^-$ | -0,12 |
| Ossigeno | |
| $\text{O} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{H}_2\text{O}$ | +2,42 |
| $\text{O}_2 + 2\text{H}_2\text{O} + 4\text{e}^- \rightleftharpoons 4\text{OH}^-$ | +0,40 |
| $\text{O}_2 + 2\text{H}_2\text{O} + 4\text{e}^- \rightleftharpoons 4\text{OH}^- \quad \text{a pH} = 7$ | +0,81 |
| $\text{O}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons 2\text{H}_2\text{O}$ | +1,23 |
| $\text{O}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons 2\text{H}_2\text{O} \quad \text{a pH} = 7$ | +0,81 |
| $\text{O}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{H}_2\text{O}_2(\text{aq})$ | +0,68 |
| $\text{O}_2 + \text{e}^- \rightleftharpoons \text{O}_2^-$ | -0,56 |
| $\text{O}_2 + \text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons \text{HO}_2^- + \text{OH}^-$ | -0,08 |
| $\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 3\text{H}_2\text{O}$ | +1,51 |
| $\text{O}_3 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{O}_2 + \text{H}_2\text{O}$ | +2,08 |
| $\text{H}_2\text{O}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{H}_2\text{O}$ | +1,78 |
| $\text{O}_3 + \text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons \text{O}_2 + 2\text{OH}^-$ | +1,24 |
| $\text{OH}_{(\text{g})} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{H}_2\text{O}$ | +2,85 |
| $\text{HO}_2(\text{aq}) + \text{H}^+ + \text{e}^- \rightleftharpoons \text{H}_2\text{O}_2$ | +1,50 |
| $\text{O}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{O} + \text{H}_2\text{O}$ | +0,04 |
| $\text{HO}_2^- + \text{H}_2\text{O} + \text{e}^- \rightleftharpoons \text{OH}_{(\text{aq})} + 2\text{OH}^-$ | -0,25 |
| $\text{HO}_2^- + \text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons 3\text{OH}^-$ | +0,88 |
| $\text{H}_2\text{O}_2 + \text{H}^+ + \text{e}^- \rightleftharpoons \text{OH}^- + \text{H}_2\text{O}$ | +0,71 |
| $\text{O}_2^- + \text{H}_2\text{O} + \text{e}^- \rightleftharpoons \text{OH}^- + \text{HO}_2^-$ | +0,41 |
| $\text{OH} + \text{e}^- \rightleftharpoons \text{OH}^-$ | +2,02 |
| $2\text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons \text{H}_2 + 2\text{OH}^-$ | -0,83 |
| $2\text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons \text{H}_2 + 2\text{OH}^- \quad \text{a pH} = 7$ | -0,42 |

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|--|-------|
| Palladio | |
| $\text{Pd}^{2+} + 2\text{e}^- \rightleftharpoons \text{Pd}$ | +0,99 |
| $\text{PdO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Pd} + \text{H}_2\text{O}$ | +0,92 |
| $\text{PdO}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{PdO} + \text{H}_2\text{O}$ | +1,26 |
| $\text{Pd(OH)}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Pd} + 2\text{H}_2\text{O}$ | +0,90 |
| $\text{Pd(OH)}_2 + 2\text{e}^- \rightleftharpoons \text{Pd} + 2\text{OH}^-$ | +0,07 |
| $2\text{Pd} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{Pd}_2\text{H}$ | +0,05 |
| $\text{PdO}_3 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{PdO}_2 + \text{H}_2\text{O}$ | +2,03 |
| $\text{PdCl}^+ + \text{e}^- \rightleftharpoons \text{Pd} + \text{Cl}^-$ | +0,77 |
| $\text{PdCl}_6^{4-} + 2\text{e}^- \rightleftharpoons \text{Pd} + 6\text{Cl}^-$ | +0,62 |
| $\text{PdCl}_4^{2-} + 2\text{e}^- \rightleftharpoons \text{Pd} + 4\text{Cl}^-$ | +0,59 |
| $\text{PdCl}_6^{2-} + 2\text{e}^- \rightleftharpoons \text{Pd} + 6\text{Cl}^-$ | +0,92 |
| | |
| Piombo | |
| $\text{Pb}^{2+} + 2\text{e}^- \rightleftharpoons \text{Pb}$ | -0,13 |
| $\text{Pb}^{4+} + 2\text{e}^- \rightleftharpoons \text{Pb}^{2+}$ | +1,67 |
| $\text{PbO} + \text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons \text{Pb} + 2\text{OH}^-$ | -0,58 |
| $\text{PbO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Pb} + \text{H}_2\text{O}$ | +0,25 |
| $\text{PbO}_2 + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Pb}^{2+} + 2\text{H}_2\text{O}$ | +1,46 |
| $\text{Pb}_3\text{O}_4 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 3\text{PbO} + \text{H}_2\text{O}$ | +0,97 |
| $\text{Pb(OH)}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Pb} + 2\text{H}_2\text{O}$ | +0,28 |
| $\text{HPbO}_2^- + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Pb} + 2\text{H}_2\text{O}$ | +0,70 |
| $\text{PbO}_3^{2-} + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{HPbO}_2^- + \text{H}_2\text{O}$ | +1,55 |
| $\text{Pb(OH)}_3^- (\text{HPbO}_2^- + \text{H}_2\text{O}) + 2\text{e}^- \rightleftharpoons \text{Pb} + 3\text{OH}^-$ | -0,54 |
| | |
| Platino | |
| $\text{Pt}^{2+} + 2\text{e}^- \rightleftharpoons \text{Pt}$ | +1,19 |
| $\text{PtCl}_4^{2-} + 2\text{e}^- \rightleftharpoons \text{Pt} + 4\text{Cl}^-$ | +0,73 |
| $\text{PtBr}_4^{2-} + 2\text{e}^- \rightleftharpoons \text{Pt} + 4\text{Br}^-$ | +0,58 |
| $\text{PtI}_4^{2-} + 2\text{e}^- \rightleftharpoons \text{Pt} + 4\text{I}^-$ | +0,40 |
| $\text{Pt(CN)}_4^{2-} + 2\text{e}^- \rightleftharpoons \text{Pt} + 4\text{CN}^-$ | +0,09 |
| $\text{PtCl}_6^{2-} + 2\text{e}^- \rightleftharpoons \text{PtCl}_4^{2-} + 2\text{Cl}^-$ | +0,68 |
| $\text{PtO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Pt} + \text{H}_2\text{O}$ | +0,98 |
| $\text{PtO}_2 + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Pt}^{2+} + 2\text{H}_2\text{O}$ | +0,84 |
| $\text{Pt(OH)}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Pt} + 2\text{H}_2\text{O}$ | +0,98 |
| $\text{Pt(OH)}_2 + 2\text{e}^- \rightleftharpoons \text{Pt} + 2\text{OH}^-$ | +0,15 |
| $[\text{Pt(CN)}_4\text{Cl}_2]^{2-} + 2\text{e}^- \rightleftharpoons \text{Pt(CN)}_4^{2-} + 2\text{Cl}^-$ | +0,89 |
| $\text{PtI}_6^{2-} + 2\text{e}^- \rightleftharpoons \text{PtI}_4^{2-} + 2\text{I}^-$ | +0,39 |
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|---|-------|
| Plutonio | |
| $\text{Pu}^{3+} + 3\text{e}^- \rightleftharpoons \text{Pu}$ | -2,03 |
| $\text{Pu}^{4+} + \text{e}^- \rightleftharpoons \text{Pu}^{3+}$ | +0,97 |
| $\text{PuO}_2 + 4\text{H}^+ + \text{e}^- \rightleftharpoons \text{Pu}^{3+} + 2\text{H}_2\text{O}$ | +0,86 |
| $\text{PuO}_2^{2+} + 4\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Pu}^{3+} + 2\text{H}_2\text{O}$ | +1,02 |
| $\text{Pu(OH)}_3 + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Pu} + 3\text{H}_2\text{O}$ | -1,59 |
| $\text{Pu(OH)}_3 + 3\text{e}^- \rightleftharpoons \text{Pu} + 3\text{OH}^-$ | -2,42 |
| $\text{Pu(OH)}_4 + 4\text{H}^+ + \text{e}^- \rightleftharpoons \text{Pu}^{3+} + 4\text{H}_2\text{O}$ | +1,18 |
| $\text{PuO}_2^{2+} + \text{e}^- \rightleftharpoons \text{PuO}_2^+$ | +0,93 |
| $\text{PuO}_2\text{OH} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{PuO}_2 + \text{H}_2\text{O}$ | +1,91 |
| $\text{PuO}_2(\text{OH})_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{PuO}_2 + 2\text{H}_2\text{O}$ | +1,49 |
| $\text{Pu(OH)}_4 + \text{e}^- \rightleftharpoons \text{Pu(OH)}_3 + \text{OH}^-$ | -0,96 |
| | |
| Polonio | |
| $\text{Po}^{2+} + 2\text{e}^- \rightleftharpoons \text{Po}$ | +0,65 |
| $\text{Po}^{3+} + 3\text{e}^- \rightleftharpoons \text{Po}$ | +0,56 |
| $\text{Po}^{4+} + 4\text{e}^- \rightleftharpoons \text{Po}$ | +0,76 |
| $\text{PoO}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Po} + 2\text{H}_2\text{O}$ | +0,72 |
| $\text{PoO}_3^{2-} + 6\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Po} + 3\text{H}_2\text{O}$ | +0,75 |
| $\text{Po} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{PoH}_2$ | -1,00 |
| $\text{PoO}_3 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{PoO}_2 + \text{H}_2\text{O}$ | +1,52 |
| $\text{Po(Cl)}_4^{2-} + 2\text{e}^- \rightleftharpoons \text{Po} + 4\text{Cl}^-$ | +0,38 |
| $\text{Po(Cl)}_6^{2-} + 2\text{e}^- \rightleftharpoons \text{Po(Cl)}_4^{2-} + 2\text{Cl}^-$ | +0,72 |
| | |
| Potassio | |
| $\text{K}^+ + \text{e}^- \rightleftharpoons \text{K}$ | -2,93 |
| $\text{K} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{KH}_{(s)}$ | +0,39 |
| $\text{K}^+ + \text{H}^+ + 2\text{e}^- \rightleftharpoons \text{KH}_{(s)}$ | -1,27 |
| | |
| Praseodimio | |
| $\text{Pr}^{3+} + 3\text{e}^- \rightleftharpoons \text{Pr}$ | -2,46 |
| $\text{Pr}^{4+} + \text{e}^- \rightleftharpoons \text{Pr}^{3+}$ | +2,86 |
| $\text{Pr(OH)}_3 + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Pr} + 3\text{H}_2\text{O}$ | -2,02 |
| $\text{Pr(OH)}_3 + 3\text{e}^- \rightleftharpoons \text{Pr} + 3\text{OH}^-$ | -2,85 |
| $\text{Pr}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Pr} + 3\text{H}_2\text{O}$ | -1,83 |
| $\text{PrO}_2 + 4\text{H}^+ + \text{e}^- \rightleftharpoons \text{Pr}^{3+} + 2\text{H}_2\text{O}$ | +2,76 |
| | |
| Promezio | |
| $\text{Pm}^{3+} + 3\text{e}^- \rightleftharpoons \text{Pm}$ | -2,42 |
| $\text{Pm}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Pm} + 3\text{H}_2\text{O}$ | -2,01 |
| $\text{Pm(OH)}_3 + 3\text{e}^- \rightleftharpoons \text{Pm} + 3\text{OH}^-$ | -2,84 |
| | |
| Protoattinio | |
| $\text{Pa}^{3+} + 3\text{e}^- \rightleftharpoons \text{Pa}$ | -1,95 |
| $\text{Pa}^{4+} + 4\text{e}^- \rightleftharpoons \text{Pa}$ | -1,70 |
| $\text{PaO}_2^+ + 4\text{H}^+ + 5\text{e}^- \rightleftharpoons \text{Pa} + 2\text{H}_2\text{O}$ | -1,00 |
| $\text{PaO}_2 + 4\text{H}^+ + \text{e}^- \rightleftharpoons \text{Pa}^{3+} + 2\text{H}_2\text{O}$ | -0,50 |

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| Radio | |
| $\text{Ra}^{2+} + 2\text{e}^- \rightleftharpoons \text{Ra}$ | -2,92 |
| $\text{Ra}^+ + \text{e}^- \rightleftharpoons \text{Ra}$ | -3,86 |
| $\text{RaO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ra} + \text{H}_2\text{O}$ | -1,32 |
| | |
| Rame | |
| $\text{Cu}^+ + \text{e}^- \rightleftharpoons \text{Cu}$ | +0,52 |
| $\text{Cu}^{2+} + 2\text{e}^- \rightleftharpoons \text{Cu}$ | +0,34 |
| $\text{CuO} + 2\text{H}^+ + \text{e}^- \rightleftharpoons \text{Cu}^+ + \text{H}_2\text{O}$ | +0,62 |
| $\text{CuO}_2^{2-} + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Cu} + 2\text{H}_2\text{O}$ | +1,52 |
| $\text{Cu}_2\text{O} + \text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons 2\text{Cu} + 2\text{OH}^-$ | -0,36 |
| $2\text{Cu}(\text{OH})_2 + 2\text{e}^- \rightleftharpoons \text{Cu}_2\text{O} + \text{H}_2\text{O} + 2\text{OH}^-$ | -0,08 |
| | |
| Renio | |
| $\text{Re} + \text{e}^- \rightleftharpoons \text{Re}^-$ | -0,40 |
| $\text{ReO}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Re} + 2\text{H}_2\text{O}$ | +0,25 |
| $\text{ReO}_2 + 2\text{H}_2\text{O} + 4\text{e}^- \rightleftharpoons \text{Re} + 4\text{OH}^-$ | -0,58 |
| $\text{ReO}_4^- + 8\text{H}^+ + 7\text{e}^- \rightleftharpoons \text{Re} + 4\text{H}_2\text{O}$ | +0,36 |
| $\text{ReO}_4^- + 2\text{H}_2\text{O} + 3\text{e}^- \rightleftharpoons \text{ReO}_2 + 4\text{OH}^-$ | -0,59 |
| $2\text{ReO}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Re}_2\text{O}_3 + \text{H}_2\text{O}$ | +0,38 |
| $\text{ReO}_3 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{ReO}_2 + \text{H}_2\text{O}$ | +0,39 |
| $\text{ReO}_2 + 4\text{H}^+ + \text{e}^- \rightleftharpoons \text{Re}^{3+} + 2\text{H}_2\text{O}$ | +0,16 |
| $\text{ReO}_4^{2-} + 8\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Re}^{3+} + 4\text{H}_2\text{O}$ | +0,80 |
| $\text{ReO}_4^- + 8\text{H}^+ + 8\text{e}^- \rightleftharpoons \text{Re}^- + 4\text{H}_2\text{O}$ | +0,27 |
| | |
| Rodio | |
| $\text{Rh}^+ + \text{e}^- \rightleftharpoons \text{Rh}$ | +0,60 |
| $\text{Rh}^{2+} + 2\text{e}^- \rightleftharpoons \text{Rh}$ | +0,60 |
| $\text{Rh}^{3+} + 3\text{e}^- \rightleftharpoons \text{Rh}$ | +0,80 |
| $\text{Rh}_2\text{O} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{Rh} + \text{H}_2\text{O}$ | +0,80 |
| $\text{Rh}_2\text{O}_3 + 6\text{H}^+ + 4\text{e}^- \rightleftharpoons 2\text{Rh}^+ + 3\text{H}_2\text{O}$ | +0,98 |
| $\text{Rh}_2\text{O}_3 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{RhO} + \text{H}_2\text{O}$ | +0,87 |
| $2\text{RhO}_4^{2-} + 10\text{H}^+ + 6\text{e}^- \rightleftharpoons \text{Rh}_2\text{O}_3 + 5\text{H}_2\text{O}$ | +2,21 |
| $\text{RhO}_4^{2-} + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{RhO}_2 + 2\text{H}_2\text{O}$ | +2,45 |
| | |
| Rubidio | |
| $\text{Rb}^+ + \text{e}^- \rightleftharpoons \text{Rb}$ | -2,93 |
| $\text{Rb} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{RbH}$ | +0,32 |
| $\text{Rb}^+ + \text{H}^+ + 2\text{e}^- \rightleftharpoons \text{RbH}$ | -1,30 |

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| Rutenio | |
| $\text{Ru}^{2+} + 2\text{e}^- \rightleftharpoons \text{Ru}$ | +0,45 |
| $\text{Ru}^{3+} + \text{e}^- \rightleftharpoons \text{Ru}^{2+}$ | +0,25 |
| $\text{Ru(OH)}_4 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Ru} + 4\text{H}_2\text{O}$ | +0,68 |
| $\text{Ru}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Ru} + 3\text{H}_2\text{O}$ | +0,74 |
| $\text{RuO}_4^{2-} + 8\text{H}^+ + 6\text{e}^- \rightleftharpoons \text{Ru} + 4\text{H}_2\text{O}$ | +1,19 |
| $\text{RuO}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Ru} + 2\text{H}_2\text{O}$ | +0,79 |
| $\text{H}_2\text{RuO}_5 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{RuO}_2 + 3\text{H}_2\text{O}$ | +1,40 |
| $\text{RuO}_4^- + 4\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{RuO}_2 + 2\text{H}_2\text{O}$ | +1,53 |
| $\text{HRuO}_5^- + \text{H}^+ + \text{e}^- \rightleftharpoons \text{RuO}_4^- + \text{H}_2\text{O}$ | +1,66 |
| $\text{RuCl}_5^{2-} + 3\text{e}^- \rightleftharpoons \text{Ru} + 5\text{Cl}^-$ | +0,60 |
| | |
| Samario | |
| $\text{Sm}^{3+} + 3\text{e}^- \rightleftharpoons \text{Sm}$ | -2,41 |
| $\text{Sm}^{2+} + 2\text{e}^- \rightleftharpoons \text{Sm}$ | -3,12 |
| $\text{Sm}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Sm} + 3\text{H}_2\text{O}$ | -2,00 |
| $\text{Sm(OH)}_3 + 3\text{e}^- \rightleftharpoons \text{Sm} + 3\text{OH}^-$ | -2,83 |
| | |
| Scandio | |
| $\text{Sc}^{3+} + 3\text{e}^- \rightleftharpoons \text{Sc}$ | -2,08 |
| $\text{Sc(OH)}_3 + 3\text{e}^- \rightleftharpoons \text{Sc} + 3\text{OH}^-$ | -2,61 |
| $\text{Sc(OH)}_3 + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{Sc} + 3\text{H}_2\text{O}$ | -1,78 |
| $\text{Sc}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Sc} + 3\text{H}_2\text{O}$ | -1,59 |
| $\text{ScOH}^{2+} + 3\text{e}^- \rightleftharpoons \text{Sc} + \text{H}_2\text{O}$ | -1,98 |
| | |
| Selenio | |
| $\text{Se} + 2\text{e}^- \rightleftharpoons \text{Se}^{2-}$ | -0,92 |
| $\text{Se} + \text{H}^+ + 2\text{e}^- \rightleftharpoons \text{HSe}^-$ | -0,51 |
| $\text{Se} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{H}_2\text{Se}_{(\text{aq})}$ | -0,40 |
| $\text{Se} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{H}_2\text{Se}_{(\text{g})}$ | -0,37 |
| $\text{SeO}_3^{2-} + 6\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Se} + 3\text{H}_2\text{O}$ | +0,88 |
| $\text{SeO}_3^{2-} + 3\text{H}_2\text{O} + 4\text{e}^- \rightleftharpoons \text{Se} + 6\text{OH}^-$ | -0,37 |
| $\text{HSeO}_3^- + 5\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Se} + 3\text{H}_2\text{O}$ | +0,79 |
| $\text{H}_2\text{SeO}_3 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Se} + 3\text{H}_2\text{O}$ | +0,74 |
| $\text{SeO}_4^{2-} + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{HSeO}_3^- + \text{H}_2\text{O}$ | +1,08 |
| $\text{SeO}_4^{2-} + \text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons \text{SeO}_3^{2-} + 2\text{OH}^-$ | +0,05 |
| $\text{HSeO}_4^- + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{H}_2\text{SeO}_3 + \text{H}_2\text{O}$ | +1,09 |
| | |
| Silicio | |
| $\text{SiO}_2(\text{quarzo}) + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Si} + 2\text{H}_2\text{O}$ | -0,86 |
| $\text{H}_2\text{SiO}_3 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Si} + 3\text{H}_2\text{O}$ | -0,78 |
| $\text{HSiO}_3^- + 5\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Si} + 3\text{H}_2\text{O}$ | -0,63 |
| $\text{SiO}_3^{2-} + 6\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Si} + 3\text{H}_2\text{O}$ | -0,46 |
| $\text{SiO}_3^{2-} + 3\text{H}_2\text{O} + 4\text{e}^- \rightleftharpoons \text{Si} + 6\text{OH}^-$ | -1,70 |
| $\text{Si} + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{SiH}_4(\text{g})$ | -0,10 |
| $\text{SiF}_6^{2-} + 4\text{e}^- \rightleftharpoons \text{Si} + 6\text{F}^-$ | -1,24 |
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| Sodio | |
| $\text{Na}^+ + \text{e}^- \rightleftharpoons \text{Na}$ | -2,71 |
| $\text{Na} + \text{H}^+ + \text{e}^- \rightleftharpoons \text{NaH}_{(\text{s})}$ | +0,39 |
| $\text{Na}^+ + \text{H}^+ + 2\text{e}^- \rightleftharpoons \text{NaH}_{(\text{s})}$ | -1,16 |
| | |
| Stagno | |
| $\text{Sn}^{2+} + 2\text{e}^- \rightleftharpoons \text{Sn}$ | -0,14 |
| $\text{Sn}^{4+} + 2\text{e}^- \rightleftharpoons \text{Sn}^{2+}$ | +0,15 |
| $\text{SnO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Sn} + \text{H}_2\text{O}$ | -0,10 |
| $\text{SnO}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Sn} + 2\text{H}_2\text{O}$ | -0,11 |
| $\text{Sn(OH)}_4 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Sn} + 4\text{H}_2\text{O}$ | -0,01 |
| $\text{Sn(OH)}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Sn} + 2\text{H}_2\text{O}$ | -0,09 |
| $\text{Sn(OH)}^{3-} (\text{HSnO}_2^- + \text{H}_2\text{O}) + 2\text{e}^- \rightleftharpoons \text{Sn} + 3\text{OH}^-$ | -0,91 |
| $\text{HSnO}_2^- + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Sn} + 2\text{H}_2\text{O}$ | +0,33 |
| $\text{SnO}_3^{2-} + 6\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Sn}^{2+} + 3\text{H}_2\text{O}$ | +0,84 |
| $\text{SnF}_6^{2-} + 4\text{e}^- \rightleftharpoons \text{Sn} + 6\text{F}^-$ | -1,51 |
| $\text{Sn(OH)}_6^{2-} + 2\text{e}^- \rightleftharpoons \text{HSnO}_2^- + \text{H}_2\text{O} + 3\text{OH}^-$ | -0,93 |
| | |
| Stronzio | |
| $\text{Sr}^{2+} + 2\text{e}^- \rightleftharpoons \text{Sr}$ | -2,89 |
| $\text{Sr(OH)}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Sr} + 2\text{H}_2\text{O}$ | -2,05 |
| $\text{Sr(OH)}_2 + 2\text{e}^- \rightleftharpoons \text{Sr} + 2\text{OH}^-$ | -2,88 |
| $\text{Sr} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{SrH}_2$ | +0,72 |
| $\text{Sr}^{2+} + 2\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{SrH}_2$ | -1,09 |
| $\text{SrO} + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{SrH}_2 + \text{H}_2\text{O}$ | -0,48 |
| $\text{SrO}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{SrO} + \text{H}_2\text{O}$ | +1,12 |
| $\text{SrO}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Sr(OH)}_2$ | -1,49 |
| $\text{SrOH}^+ + 2\text{e}^- \rightleftharpoons \text{Sr} + \text{OH}^-$ | -2,91 |
| | |
| Tallio | |
| $\text{TI}^+ + \text{e}^- \rightleftharpoons \text{TI}$ | -0,34 |
| $\text{TI}^{3+} + 2\text{e}^- \rightleftharpoons \text{TI}^+$ | +1,25 |
| $\text{TI}_2\text{O} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{TI} + \text{H}_2\text{O}$ | +0,51 |
| $\text{TI}_2\text{O}_3 + 6\text{H}^+ + 4\text{e}^- \rightleftharpoons 2\text{TI}^+ + 3\text{H}_2\text{O}$ | +1,33 |
| $\text{TI(OH)}_3 + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{TI}^+ + 3\text{H}_2\text{O}$ | +1,19 |
| $\text{TI(OH)}_3 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{TIOH} + 2\text{H}_2\text{O}$ | +0,78 |
| $\text{TI(OH)}_3 + 2\text{e}^- \rightleftharpoons \text{TIOH} + 2\text{OH}^-$ | -0,05 |
| $\text{TIOH} + \text{e}^- \rightleftharpoons \text{TI} + \text{OH}^-$ | +0,34 |
| | |
| Tantalo | |
| $\text{Ta}_2\text{O}_5 + 10\text{H}^+ + 10\text{e}^- \rightleftharpoons 2\text{Ta} + 5\text{H}_2\text{O}$ | -0,81 |
| | |
| Tecnezio | |
| $\text{Tc}^{2+} + 2\text{e}^- \rightleftharpoons \text{Tc}$ | +0,40 |
| $\text{TcO}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Tc} + 2\text{H}_2\text{O}$ | +0,27 |
| $\text{HTcO}_4 + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{TcO}_2 + 2\text{H}_2\text{O}$ | +0,74 |
| $\text{TcO}_4^- + 8\text{H}^+ + 7\text{e}^- \rightleftharpoons \text{Tc} + 4\text{H}_2\text{O}$ | +0,47 |

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| $\text{HTcO}_4 + \text{H}^+ + \text{e}^- \rightleftharpoons \text{TcO}_3 + \text{H}_2\text{O}$ | +0,71 |
| Tellurio | |
| $\text{Te} + 2\text{e}^- \rightleftharpoons \text{Te}^{2-}$ | -1,14 |
| $\text{Te}^{4+} + 4\text{e}^- \rightleftharpoons \text{Te}$ | +0,57 |
| $\text{Te} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{H}_2\text{Te}_{(\text{g})}$ | -0,72 |
| $2\text{Te} + 2\text{e}^- \rightleftharpoons \text{Te}_2^{2-}$ | -0,79 |
| $\text{Te} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{H}_2\text{Te}_{(\text{aq})}$ | -0,74 |
| $\text{Te}_2^{2-} + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{H}_2\text{Te}_{(\text{g})}$ | -0,60 |
| $\text{Te}_2 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{H}_2\text{Te}_{2(\text{g})}$ | -0,37 |
| $\text{Te}_2^{2-} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{HTe}^-$ | -0,80 |
| $\text{TeO}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Te} + 2\text{H}_2\text{O}$ | +0,53 |
| $\text{H}_2\text{TeO}_4 + 8\text{H}^+ + 8\text{e}^- \rightleftharpoons \text{H}_2\text{Te}_{(\text{aq})} + 4\text{H}_2\text{O}$ | +0,33 |
| $\text{TeO}_3^{2-} + 6\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Te} + 3\text{H}_2\text{O}$ | +0,83 |
| $\text{HTeO}_4^- + \text{H}^+ + 2\text{e}^- \rightleftharpoons \text{TeO}_3^{2-} + \text{H}_2\text{O}$ | +0,58 |
| $\text{TeO}_4^{2-} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{TeO}_3^{2-} + \text{H}_2\text{O}$ | +0,89 |
| $\text{HTeO}_3^- + 5\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Te} + 3\text{H}_2\text{O}$ | +0,71 |
| Terbio | |
| $\text{Tb}^{3+} + 3\text{e}^- \rightleftharpoons \text{Tb}$ | -2,39 |
| $\text{Tb}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Tb} + 3\text{H}_2\text{O}$ | -2,00 |
| $\text{Tb}(\text{OH})_3 + 3\text{e}^- \rightleftharpoons \text{Tb} + 3\text{OH}^-$ | -2,79 |
| Titanio | |
| $\text{Ti}^{2+} + 2\text{e}^- \rightleftharpoons \text{Ti}$ | -1,63 |
| $\text{Ti}^{3+} + 2\text{e}^- \rightleftharpoons \text{Ti}^{2+}$ | -0,37 |
| $\text{Ti}^{4+} + \text{e}^- \rightleftharpoons \text{Ti}^{3+}$ | +0,00 |
| $\text{TiO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ti} + \text{H}_2\text{O}$ | -1,31 |
| $\text{Ti}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Ti} + 3\text{H}_2\text{O}$ | -1,25 |
| $\text{TiO}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Ti} + 2\text{H}_2\text{O}$ | -1,07 |
| $2\text{Ti}_3\text{O}_5 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons 3\text{Ti}_2\text{O}_3 + \text{H}_2\text{O}$ | -0,49 |
| $\text{Ti}_3\text{O}_5 + 4\text{H}_2\text{O} + \text{H}^+ + \text{e}^- \rightleftharpoons 3\text{Ti}(\text{OH})_3$ | -1,18 |
| $\text{HTiO}_3^- + 5\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Ti}^{2+} + 3\text{H}_2\text{O}$ | +0,36 |
| Torio | |
| $\text{Th}^{4+} + 4\text{e}^- \rightleftharpoons \text{Th}$ | -1,90 |
| $\text{ThO}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Th} + 2\text{H}_2\text{O}$ | -1,79 |
| $\text{Th}(\text{OH})_4 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{Th} + 4\text{H}_2\text{O}$ | -1,65 |
| $\text{Th}(\text{OH})_4 + 4\text{e}^- \rightleftharpoons \text{Th} + 4\text{OH}^-$ | -2,48 |
| Tulio | |
| $\text{Tm}^{3+} + 3\text{e}^- \rightleftharpoons \text{Tm}$ | -2,28 |
| $\text{Tm}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{Tm} + 3\text{H}_2\text{O}$ | -1,91 |
| $\text{Tm}(\text{OH})_3 + 3\text{e}^- \rightleftharpoons \text{Tm} + 3\text{OH}^-$ | -2,74 |
| Tungsteno (Wolframio) | |
| $\text{WO}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{W} + 2\text{H}_2\text{O}$ | -0,02 |
| $\text{WO}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons \text{W} + 3\text{H}_2\text{O}$ | -0,09 |

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| $2\text{WO}_3 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{W}_2\text{O}_5 + \text{H}_2\text{O}$ | -0,03 |
| $\text{WO}_4^{2-} + 8\text{H}^+ + 6\text{e}^- \rightleftharpoons \text{W} + 4\text{H}_2\text{O}$ | +0,05 |
| Uranio | |
| $\text{U}^{3+} + 3\text{e}^- \rightleftharpoons \text{U}$ | -1,80 |
| $\text{U}^{4+} + \text{e}^- \rightleftharpoons \text{U}^{3+}$ | -0,61 |
| $\text{UO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{U} + \text{H}_2\text{O}$ | -1,44 |
| $\text{UO}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{U} + 2\text{H}_2\text{O}$ | -1,44 |
| $\text{U(OH)}_4 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons \text{U} + 4\text{H}_2\text{O}$ | -1,35 |
| $\text{UO}_3 + \text{H}_2\text{O} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{U(OH)}_4$ | +0,48 |
| $\text{U} + 3\text{H}^+ + 3\text{e}^- \rightleftharpoons \text{UH}_3$ | +0,26 |
| $\text{UO}_2^{2+} + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{U}^{4+} + 2\text{H}_2\text{O}$ | +0,33 |
| $\text{UO}^{2+} + 4\text{H}^+ + \text{e}^- \rightleftharpoons \text{U}^{4+} + 2\text{H}_2\text{O}$ | +0,61 |
| $\text{U}_2\text{O}_3 + 6\text{H}^+ + 6\text{e}^- \rightleftharpoons 2\text{U} + 3\text{H}_2\text{O}$ | -1,35 |
| $\text{U}_3\text{O}_8 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons 3\text{UO}_2 + 2\text{H}_2\text{O}$ | +0,53 |
| $\text{UO}_4^{2-} + 4\text{H}_2\text{O} + 2\text{e}^- \rightleftharpoons \text{U(OH)}_4 + 4\text{OH}^-$ | -1,62 |
| $\text{UO}_3 \cdot \text{H}_2\text{O} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{U(OH)}_4$ | +0,19 |
| $\text{UO}_3 \cdot \text{H}_2\text{O} = \text{H}_2\text{UO}_4 = \text{UO}_2(\text{OH})_2$ | |
| Vanadio | |
| $\text{V}^{2+} + 2\text{e}^- \rightleftharpoons \text{V}$ | -1,19 |
| $\text{V}^{3+} + \text{e}^- \rightleftharpoons \text{V}^{2+}$ | -0,26 |
| $\text{V}_2\text{O}_2 + 4\text{H}^+ + 4\text{e}^- \rightleftharpoons 2\text{V} + 2\text{H}_2\text{O}$ | -0,82 |
| $\text{VO}^{2+} + 2\text{H}^+ + \text{e}^- \rightleftharpoons \text{V}^{3+} + \text{H}_2\text{O}$ | +0,36 |
| $\text{V(OH)}^{4+} + 2\text{H}^+ + \text{e}^- \rightleftharpoons \text{VO}^{2+} + 3\text{H}_2\text{O}$ | +1,00 |
| $\text{V}_2\text{O}_3 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{V}_2\text{O}_2 + \text{H}_2\text{O}$ | -0,55 |
| $\text{V}_2\text{O}_4 + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{V}_2\text{O}_3 + \text{H}_2\text{O}$ | +0,21 |
| $\text{V}_2\text{O}_5 + 6\text{H}^+ + 2\text{e}^- \rightleftharpoons 2\text{VO}^{2+} + 3\text{H}_2\text{O}$ | +0,96 |
| $\text{VO}_2^{+} + 2\text{H}^+ + \text{e}^- \rightleftharpoons \text{VO}^{2+} + \text{H}_2\text{O}$ | +0,99 |
| $\text{VO}^{2+} + \text{e}^- \rightleftharpoons \text{VO}^{+}$ | -0,04 |
| $\text{HV}_2\text{O}_5^{-} + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{V}_2\text{O}_3 + 2\text{H}_2\text{O}$ | +0,52 |
| $2\text{H}_2\text{VO}_4^{-} + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{HV}_2\text{O}_5^{-} + 3\text{H}_2\text{O}$ | +0,72 |
| $2\text{HVO}_4^{2-} + 5\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{HV}_2\text{O}_5^{-} + 3\text{H}_2\text{O}$ | +1,28 |
| $2\text{VO}_4^{3-} + 7\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{HV}_2\text{O}_5^{-} + 3\text{H}_2\text{O}$ | +1,96 |
| $\text{H}_3\text{V}_2\text{O}_7^{-} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{HV}_2\text{O}_5^{-} + 2\text{H}_2\text{O}$ | +0,50 |
| $\text{HV}_6\text{O}_{11}^{3-} + 16\text{H}_2\text{O} + 30\text{e}^- \rightleftharpoons 6\text{V} + 33\text{OH}^-$ | -1,15 |
| Zinco | |
| $\text{Zn}^{2+} + 2\text{e}^- \rightleftharpoons \text{Zn}$ | -0,76 |
| $\text{ZnO} + 2\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Zn} + \text{H}_2\text{O}$ | -0,44 |
| $\text{Zn(OH)}_2 + 2\text{e}^- \rightleftharpoons \text{Zn} + 2\text{OH}^-$ | -1,25 |
| $\text{Zn(OH)}_4^{2-} (\text{ZnO}_2^{2-} + 2\text{H}_2\text{O}) + 2\text{e}^- \rightleftharpoons \text{Zn} + 4\text{OH}^-$ | -1,21 |
| $\text{ZnO}_2^{2-} + 4\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Zn} + 2\text{H}_2\text{O}$ | +0,44 |
| $\text{HZnO}_2^{-} + 3\text{H}^+ + 2\text{e}^- \rightleftharpoons \text{Zn} + 2\text{H}_2\text{O}$ | +0,05 |
| $\text{Zn(OH)}_3^{-} + 2\text{e}^- \rightleftharpoons \text{Zn} + 2\text{OH}^-$ | -1,18 |

| Zirconio | | |
|---|--|-------|
| $\text{Zr}^{4+} + 4\text{e}^- \longleftrightarrow \text{Zr}$ | | -1,53 |
| $\text{ZrO}_2 + 4\text{H}^+ + 4\text{e}^- \longleftrightarrow \text{Zr} + 2\text{H}_2\text{O}$ | | -1,46 |
| $\text{ZrO}^{2+} + 4\text{e}^- \longleftrightarrow \text{Zr} + \text{H}_2\text{O}$ | | -1,57 |
| $\text{Zr}(\text{OH})_4 + 4\text{H}^+ + 4\text{e}^- \longleftrightarrow \text{Zr} + 4\text{H}_2\text{O}$ | | -1,55 |
| $\text{ZrO}(\text{OH})_2 + 4\text{H}^+ + 4\text{e}^- \longleftrightarrow \text{Zr} + 3\text{H}_2\text{O}$ | | -1,55 |
| $\text{H}_2\text{ZrO}_3 + \text{H}_2\text{O} + 4\text{e}^- \longleftrightarrow \text{Zr} + 4\text{OH}^-$ | | -2,36 |
| $\text{HZrO}_3^- + 5\text{H}^+ + 4\text{e}^- \longleftrightarrow \text{Zr} + 3\text{H}_2\text{O}$ | | -1,28 |
| | | |
| Zolfo | | |
| $\text{S} + \text{H}^+ + 2\text{e}^- \longleftrightarrow \text{HS}^-$ | | -0,07 |
| $\text{S} + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{H}_2\text{S}_{(\text{aq})}$ | | +0,14 |
| $\text{S} + 2\text{e}^- \longleftrightarrow \text{S}^{2-}$ | | -0,48 |
| $\text{SO}_4^{2-} + 8\text{H}^+ + 6\text{e}^- \longleftrightarrow \text{S} + 4\text{H}_2\text{O}$ | | +0,36 |
| $\text{HSO}_4^- + 7\text{H}^+ + 6\text{e}^- \longleftrightarrow \text{S} + 4\text{H}_2\text{O}$ | | +0,34 |
| $\text{SO}_4^{2-} + 4\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{H}_2\text{SO}_3 + \text{H}_2\text{O}$ | | +0,17 |
| $\text{S}_2\text{O}_6^{2-} + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow 2\text{HSO}_3^-$ | | +0,46 |
| $\text{H}_2\text{SO}_3 + 4\text{H}^+ + 4\text{e}^- \longleftrightarrow \text{S} + 3\text{H}_2\text{O}$ | | +0,45 |
| $\text{SO}_2 + 4\text{H}^+ + 4\text{e}^- \longleftrightarrow \text{S} + 2\text{H}_2\text{O}$ | | +0,45 |
| $\text{S}_4\text{O}_6^{2-} + 12\text{H}^+ + 10\text{e}^- \longleftrightarrow 4\text{S} + 6\text{H}_2\text{O}$ | | +0,42 |
| $\text{S}_2\text{O}_3^{2-} + 6\text{H}^+ + 4\text{e}^- \longleftrightarrow 2\text{S} + 3\text{H}_2\text{O}$ | | +0,46 |
| $\text{S}_2\text{O}_6^{2-} + 12\text{H}^+ + 10\text{e}^- \longleftrightarrow 2\text{S} + 6\text{H}_2\text{O}$ | | +0,47 |
| $\text{S}_2\text{O}_4^{2-} + 8\text{H}^+ + 6\text{e}^- \longleftrightarrow 2\text{S} + 4\text{H}_2\text{O}$ | | +0,64 |
| $\text{S}_2\text{O}_8^{2-} + 2\text{e}^- \longleftrightarrow 2\text{SO}_4^{2-}$ | | +2,01 |
| $\text{SO}_4^{2-} + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{SO}_3^{2-} + \text{H}_2\text{O}$ | | -0,09 |
| $\text{SO}_4^{2-} + \text{H}_2\text{O} + 2\text{e}^- \longleftrightarrow \text{SO}_3^{2-} + 2\text{OH}^-$ | | -0,90 |
| $2\text{S} + 2\text{e}^- \longleftrightarrow \text{S}_2^{2-}$ | | -0,43 |
| $3\text{S} + 2\text{e}^- \longleftrightarrow \text{S}_3^{2-}$ | | -0,39 |
| $4\text{S} + 2\text{e}^- \longleftrightarrow \text{S}_4^{2-}$ | | -0,36 |
| $5\text{S} + 2\text{e}^- \longleftrightarrow \text{S}_5^{2-}$ | | -0,34 |
| $\text{SO} + 2\text{H}^+ + 2\text{e}^- \longleftrightarrow \text{S} + \text{H}_2\text{O}$ | | +1,51 |
| $2\text{HSO}_3^- + 4\text{H}^+ + 4\text{e}^- \longleftrightarrow \text{S}_2\text{O}_3^{2-} + 3\text{H}_2\text{O}$ | | +0,49 |