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## Tin(II)

Reaction	Baes and Mesmer, 1976	Feitknecht, 1963	Hummel et al., 2002	NIST46	Cigala et al., 2012	Gamsjäger et al, 2012	Brown and Ekberg, 2016
$\text{Sn}^{2+} + \text{H}_2\text{O} = \text{SnOH}^+ + \text{H}^+$	-3.40		$-3.8 \pm 0.2$	-3.4	$-3.52 \pm 0.05$	$-3.53 \pm 0.40$	$-3.53 \pm 0.40$
$\text{Sn}^{2+} + 2 \text{H}_2\text{O} = \text{Sn}(\text{OH})_2 + 2 \text{H}^+$	-7.06		$-7.7 \pm 0.2$	-7.1	$-6.26 \pm 0.06$	$-7.68 \pm 0.40$	$-7.68 \pm 0.40$
$\text{Sn}^{2+} + 3 \text{H}_2\text{O} = \text{Sn}(\text{OH})_3^- + 3 \text{H}^+$	-16.61		$-17.5 \pm 0.2$	-16.6	$-16.97 \pm 0.17$	$-17.00 \pm 0.60$	$-17.56 \pm 0.40$
$2 \text{Sn}^{2+} + 2 \text{H}_2\text{O} = \text{Sn}_2(\text{OH})_2^{2+} + 2 \text{H}^+$	-4.77			-4.8	$-4.79 \pm 0.05$		
$3 \text{Sn}^{2+} + 4 \text{H}_2\text{O} = \text{Sn}_3(\text{OH})_4^{2+} + 4 \text{H}^+$	-6.88		$-5.6 \pm 1.6$	-6.88	$-5.88 \pm 0.05$	$-5.60 \pm 0.47$	$-5.60 \pm 0.47$
$\text{Sn}(\text{OH})_2(\text{s}) = \text{Sn}^{2+} + 2 \text{OH}^-$				-25.8	$-26.28 \pm 0.08$		

$\text{SnO(s)} + 2 \text{H}^+ = \text{Sn}^{2+} + \text{H}_2\text{O}$	1.76		$2.5 \pm 0.5$				$1.60 \pm 0.15$
$\text{SnO(s)} + \text{H}_2\text{O} = \text{Sn}^{2+} + 2 \text{OH}^-$		-26.2					
$\text{SnO(s)} + \text{H}_2\text{O} = \text{Sn(OH)}_2$		-5.3					
$\text{SnO(s)} + 2 \text{H}_2\text{O} = \text{Sn(OH)}_3^- + \text{H}^+$		-0.9					

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## Tin(IV)

Reaction	Hummel et al., 2002	Gamsjäger et al, 2012	Brown and Ekberg, 2016
$\text{Sn}^{4+} + 4 \text{H}_2\text{O} = \text{Sn}(\text{OH})_4 + 4 \text{H}^+$			$7.53 \pm 0.12$
$\text{Sn}^{4+} + 5 \text{H}_2\text{O} = \text{Sn}(\text{OH})_5^- + 5 \text{H}^+$			$-1.07 \pm 0.42$
$\text{Sn}^{4+} + 6 \text{H}_2\text{O} = \text{Sn}(\text{OH})_6^{2-} + 6 \text{H}^+$			$-11.14 \pm 0.32$
$\text{Sn}(\text{OH})_4 + \text{H}_2\text{O} = \text{Sn}(\text{OH})_5^- + \text{H}^+$	$-8.0 \pm 0.3$	$-8.60 \pm 0.40$	
$\text{Sn}(\text{OH})_4 + 2 \text{H}_2\text{O} = \text{Sn}(\text{OH})_6^{2-} + 2 \text{H}^+$	$-18.4 \pm 0.3$	$-18.67 \pm 0.30$	
$\text{SnO}_2(\text{cr}) + 2 \text{H}_2\text{O} = \text{Sn}(\text{OH})_4$	$-8.0 \pm 0.2$	$-8.06 \pm 0.11$	

$\text{SnO}_2(\text{am}) + 2 \text{H}_2\text{O} = \text{Sn}(\text{OH})_4$	$-7.3 \pm 0.3$	$-7.22 \pm 0.08$	
$\text{SnO}_2(\text{s}) + 4 \text{H}^+ = \text{Sn}^{4+} + 2 \text{H}_2\text{O}$			$-15.59 \pm 0.04$

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