

# Louis Schlapbach

## List of Publications by Year in descending order

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62  
papers

11,223  
citations

136740

32  
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133063

59  
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74  
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74  
docs citations

74  
times ranked

10280  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced thermoelectric properties of samarium boride. <i>Journal of Materiomics</i> , 2015, 1, 196-204.	2.8	52
2	Hydrogen-storage materials for mobile applications. , 2010, , 265-270.		67
3	Hydrogen-fuelled vehicles. <i>Nature</i> , 2009, 460, 809-811.	13.7	379
4	Formation of electron traps in amorphous silica. <i>Physical Review B</i> , 2007, 76, .	1.1	12
5	Cell spreading on quartz crystal microbalance elicits positive frequency shifts indicative of viscosity changes. <i>Analytical and Bioanalytical Chemistry</i> , 2003, 377, 578-586.	1.9	73
6	Cobalt-Free Over-Stoichiometric Laves Phase Alloys for NiMH Batteries.. <i>ChemInform</i> , 2003, 34, no.	0.1	0
7	Synthesis of carbon nanotubes over Fe catalyst on aluminium and suggested growth mechanism. <i>Carbon</i> , 2003, 41, 539-547.	5.4	209
8	Physisorption of hydrogen in single-walled carbon nanotubes. <i>Carbon</i> , 2003, 41, 2377-2383.	5.4	91
9	Modification of the micro- and nanotopography of several polymers by plasma treatments. <i>Applied Surface Science</i> , 2003, 207, 276-286.	3.1	101
10	Cobalt-free over-stoichiometric Laves phase alloys for NiMH batteries. <i>Journal of Alloys and Compounds</i> , 2003, 350, 319-323.	2.8	10
11	Nanostructured graphite-hydrogen systems prepared by mechanical milling method. <i>Molecular Crystals and Liquid Crystals</i> , 2002, 386, 173-178.	0.4	5
12	Prospects and Limitations of Carbon Nanotube Field Emission Electron Sources. <i>Chimia</i> , 2002, 56, 553-561.	0.3	13
13	Hydrogen as a Fuel and Its Storage for Mobility and Transport. <i>MRS Bulletin</i> , 2002, 27, 675-679.	1.7	118
14	Hydrogen adsorption in carbonaceous materials. <i>Journal of Alloys and Compounds</i> , 2002, 330-332, 666-669.	2.8	73
15	Hydrogen storage in carbon nanostructures. <i>International Journal of Hydrogen Energy</i> , 2002, 27, 203-212.	3.8	509
16	Synthesis of oriented nanotube films by chemical vapor deposition. <i>Carbon</i> , 2002, 40, 1339-1344.	5.4	70
17	Chemical Nucleation for CVD Diamond Growth. <i>Journal of the American Chemical Society</i> , 2001, 123, 2271-2274.	6.6	12
18	Hydrogen for novel materials and devices. <i>Applied Physics A: Materials Science and Processing</i> , 2001, 72, 245-253.	1.1	42

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19	Adsorption and Bioactivity of Protein A on Silicon Surfaces Studied by AFM and XPS. Journal of Colloid and Interface Science, 2001, 233, 180-189.	5.0	99
20	Hydrogen-storage materials for mobile applications. Nature, 2001, 414, 353-358.	13.7	7,383
21	Evaluating mechanical adhesion of sol-gel titanium dioxide coatings containing calcium phosphate for metal implant application. Biomaterials, 2000, 21, 2193-2201.	5.7	87
22	The protection of metallic archaeological objects using plasma polymer coatings. Surface and Coatings Technology, 2000, 125, 377-382.	2.2	30
23	In situ x-ray absorption study of $Zr_{(0.29Ni_{0.71})_3}$ hydride electrodes. Physical Review B, 2000, 61, 13647-13654.	1.1	5
24	Effects of Ti on the cycle life of amorphous MgNi-based alloy prepared by ball milling. Journal of Alloys and Compounds, 2000, 306, 219-226.	2.8	89
25	Printing Gel-like Catalysts for the Directed Growth of Multiwall Carbon Nanotubes. Langmuir, 2000, 16, 6877-6883.	1.6	77
26	Electrochemical storage of hydrogen in carbon single wall nanotubes. , 1999, , .		2
27	Hydrogen in the mechanically prepared nanostructured graphite. Applied Physics Letters, 1999, 75, 3093-3095.	1.5	227
28	Electrochemical properties of $Zr_{(VxNi_{1-x})_3}$ as electrode material in nickel-metal hydride batteries. International Journal of Hydrogen Energy, 1999, 24, 229-233.	3.8	6
29	Influence of the alloy morphology on the kinetics of AB <sub>5</sub> -type metal hydride electrodes. Journal of Alloys and Compounds, 1999, 285, 292-297.	2.8	15
30	Hydrogen absorption and hydride electrode behaviour of the Laves phase $Zr_{1.5-x}Cr_xNi_{1.5}$ . Journal of Alloys and Compounds, 1999, 291, 289-294.	2.8	11
31	Structural and hydriding properties of $(Mg_{1-x}Al_x)NiH(D)$ with amorphous or CsCl-type cubic structure ( $x=0-0.5$ ). Acta Materialia, 1998, 46, 4519-4525.	3.8	37
32	Bulk and surface properties of crystalline and amorphous $Zr_{36}(V_{0.33}Ni_{0.66})_{64}$ alloy as active electrode material. Journal of Alloys and Compounds, 1998, 266, 321-326.	2.8	10
33	Hydriding properties of the $Zr(Cr_{0.5}Ni_{0.5})_{1.75-3.5}$ alloy system. Journal of Alloys and Compounds, 1998, 274, 294-298.	2.8	7
34	Chemical vapor deposition of diamond growth using a chemical precursor. Applied Physics Letters, 1998, 73, 1050-1052.	1.5	11
35	Electron field emission from phase pure nanotube films grown in a methane/hydrogen plasma. Applied Physics Letters, 1998, 73, 2113-2115.	1.5	191
36	Structural- and hydriding-properties of the $Zr(V_{0.25}Ni_{0.75})_{1-4}$ alloy system. Journal of Alloys and Compounds, 1997, 253-254, 587-589.	2.8	18

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37	ZrV <sub>1.5</sub> Ni <sub>1.5</sub> as electrode material in nickel-metal hydride batteries An in situ scanning tunnelling microscopy investigation. Journal of Alloys and Compounds, 1997, 260, 265-270.	2.8	7
38	In situ STM investigation of metal hydride electrodes in alkaline electrolyte during electrochemical cycles. Journal of Alloys and Compounds, 1997, 261, 273-275.	2.8	5
39	Surface-state dispersion of hydrogenated and hydrogen-free diamond (100) surfaces determined by angle-resolved photoemission. Surface Science, 1997, 393, L77-L83.	0.8	19
40	Photoemission from the negative electron affinity (100) natural hydrogen terminated diamond surface. Surface Science, 1996, 349, 176-184.	0.8	63
41	Properties of Zr(V <sub>0.25</sub> Ni <sub>0.75</sub> ) <sub>2</sub> metal hydride as active electrode material. Journal of Alloys and Compounds, 1996, 239, 175-182.	2.8	23
42	The influence of cobalt on the electrochemical cycling stability of LaNi <sub>5</sub> -based hydride forming alloys. Journal of Alloys and Compounds, 1996, 241, 160-166.	2.8	169
43	STM investigations with atomic resolution on the (2 Å <sup>-1</sup> ) monohydride natural doped diamond (100) surface. Surface Science, 1996, 369, L111-L116.	0.8	26
44	Electron field emission from diamond tips prepared by ion sputtering. Applied Physics Letters, 1996, 69, 2662-2664.	1.5	38
45	Final-state scattering in angle-resolved ultraviolet photoemission from copper. Physical Review B, 1996, 53, 10209-10216.	1.1	47
46	Influence of electrode thickness on charge-discharge behaviour of AB <sub>5</sub> -type metal hydride electrodes. Journal of Alloys and Compounds, 1995, 221, 207-211.	2.8	9
47	Passivation behavior of AB <sub>5</sub> -type hydrogen storage alloys for battery electrode application. Journal of Alloys and Compounds, 1995, 221, 284-290.	2.8	29
48	Electrochemical and surface properties of iron-containing AB <sub>5</sub> -type alloys. Journal of Alloys and Compounds, 1995, 231, 639-644.	2.8	38
49	Surface and bulk properties of the Ti <sub>y</sub> Zr <sub>1-<math>\hat{y}</math></sub> (V <sub>x</sub> Ni <sub>1-<math>\hat{x}</math></sub> ) <sub>2</sub> alloy system as active electrode material in alkaline electrolyte. Journal of Alloys and Compounds, 1995, 231, 645-649.	2.8	39
50	The preparation and characterization of low surface roughness (111) and (100) natural diamonds by hydrogen plasma. Surface Science, 1995, 337, L812-L818.	0.8	96
51	Electrochemical and surface properties of Zr(V <sub>x</sub> Ni <sub>1-x</sub> ) <sub>2</sub> alloys as hydrogen-absorbing electrodes in alkaline electrolyte. Journal of Alloys and Compounds, 1994, 203, 235-241.	2.8	54
52	Effects of pretreatment on the activation behavior of Zr(V <sub>0.25</sub> Ni <sub>0.75</sub> ) <sub>2</sub> metal hydride electrodes in alkaline solution. Journal of Alloys and Compounds, 1994, 209, 99-105.	2.8	64
53	Effects of electrode compacting additives on the cycle life and high-rate dischargeability of Zr(V <sub>0.25</sub> Ni <sub>0.75</sub> ) <sub>2</sub> metal hydride electrodes in alkaline solution. Journal of Alloys and Compounds, 1994, 206, 31-38.	2.8	31
54	Effect of Partial Substitution of Nickel in AB <sub>2</sub> -Type Zr-Ni Alloys by V, Cr and Mn on the Surface- and Bulk-Properties in View of Battery Applications*. Zeitschrift Fur Physikalische Chemie, 1994, 183, 355-363.	1.4	11

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55	Effect of Silicon on the Properties of AB5-Based Alloys for Battery Electrode Application*. Zeitschrift Fur Physikalische Chemie, 1994, 183, 371-377.	1.4	14
56	AB2 and AB5 metal hydride electrodes: a phenomenological model for the cycle life. Journal of Alloys and Compounds, 1993, 200, 157-163.	2.8	35
57	Electrochemical and surface properties of low cost, cobalt-free LaNi5-type hydrogen storage alloys. Journal of Alloys and Compounds, 1993, 202, 81-88.	2.8	58
58	Surface and bulk properties of LaNi <sub>5-x</sub> Si <sub>x</sub> alloys from the viewpoint of battery applications. Journal of Alloys and Compounds, 1992, 190, 17-24.	2.8	60
59	Surface and electrochemical characterization of Pd cathodes after prolonged charging in LiOD + D2O solutions. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1990, 286, 257-264.	0.3	12
60	Valence Transition in Yb Hydrides*. Zeitschrift Fur Physikalische Chemie, 1989, 163, 579-584.	1.4	4
61	Electronic properties. Topics in Applied Physics, 1988, , 139-217.	0.4	32
62	Density of occupied states of intermetallic hydride NiMg <sub>2</sub> H <sub>4</sub> . Journal of the Less Common Metals, 1984, 103, 389-399.	0.9	52