

Louis Schlapbach

List of Publications by Year in descending order

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62
papers

11,223
citations

136740

32
h-index

133063

59
g-index

74
all docs

74
docs citations

74
times ranked

10280
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrogen-storage materials for mobile applications. <i>Nature</i> , 2001, 414, 353-358.	13.7	7,383
2	Hydrogen storage in carbon nanostructures. <i>International Journal of Hydrogen Energy</i> , 2002, 27, 203-212.	3.8	509
3	Hydrogen-fuelled vehicles. <i>Nature</i> , 2009, 460, 809-811.	13.7	379
4	Hydrogen in the mechanically prepared nanostructured graphite. <i>Applied Physics Letters</i> , 1999, 75, 3093-3095.	1.5	227
5	Synthesis of carbon nanotubes over Fe catalyst on aluminium and suggested growth mechanism. <i>Carbon</i> , 2003, 41, 539-547.	5.4	209
6	Electron field emission from phase pure nanotube films grown in a methane/hydrogen plasma. <i>Applied Physics Letters</i> , 1998, 73, 2113-2115.	1.5	191
7	The influence of cobalt on the electrochemical cycling stability of LaNi ₅ -based hydride forming alloys. <i>Journal of Alloys and Compounds</i> , 1996, 241, 160-166.	2.8	169
8	Hydrogen as a Fuel and Its Storage for Mobility and Transport. <i>MRS Bulletin</i> , 2002, 27, 675-679.	1.7	118
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	Adsorption and Bioactivity of Protein A on Silicon Surfaces Studied by AFM and XPS. <i>Journal of Colloid and Interface Science</i> , 2001, 233, 180-189.	5.0	99
11	The preparation and characterization of low surface roughness (111) and (100) natural diamonds by hydrogen plasma. <i>Surface Science</i> , 1995, 337, L812-L818.	0.8	96
12	Physisorption of hydrogen in single-walled carbon nanotubes. <i>Carbon</i> , 2003, 41, 2377-2383.	5.4	91
13	Effects of Ti on the cycle life of amorphous MgNi-based alloy prepared by ball milling. <i>Journal of Alloys and Compounds</i> , 2000, 306, 219-226.	2.8	89
14	Evaluating mechanical adhesion of sol-gel titanium dioxide coatings containing calcium phosphate for metal implant application. <i>Biomaterials</i> , 2000, 21, 2193-2201.	5.7	87
15	Printing Gel-like Catalysts for the Directed Growth of Multiwall Carbon Nanotubes. <i>Langmuir</i> , 2000, 16, 6877-6883.	1.6	77
16	Hydrogen adsorption in carbonaceous materials. <i>Journal of Alloys and Compounds</i> , 2002, 330-332, 666-669.	2.8	73
17	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
18	Synthesis of oriented nanotube films by chemical vapor deposition. <i>Carbon</i> , 2002, 40, 1339-1344.	5.4	70

#	ARTICLE	IF	CITATIONS
19	Hydrogen-storage materials for mobile applications. , 2010, , 265-270.		67
20	Effects of pretreatment on the activation behavior of Zr(V _{0.25} Ni _{0.75}) ₂ metal hydride electrodes in alkaline solution. Journal of Alloys and Compounds, 1994, 209, 99-105.	2.8	64
21	Photoemission from the negative electron affinity (100) natural hydrogen terminated diamond surface. Surface Science, 1996, 349, 176-184.	0.8	63
22	Surface and bulk properties of LaNi ₅ alloys from the viewpoint of battery applications. Journal of Alloys and Compounds, 1992, 190, 17-24.	2.8	60
23	Electrochemical and surface properties of low cost, cobalt-free LaNi ₅ -type hydrogen storage alloys. Journal of Alloys and Compounds, 1993, 202, 81-88.	2.8	58
24	Electrochemical and surface properties of Zr(V _x Ni _{1-x}) ₂ alloys as hydrogen-absorbing electrodes in alkaline electrolyte. Journal of Alloys and Compounds, 1994, 203, 235-241.	2.8	54
25	Density of occupied states of intermetallic hydride NiMg ₂ H ₄ . Journal of the Less Common Metals, 1984, 103, 389-399.	0.9	52
26	Enhanced thermoelectric properties of samarium boride. Journal of Materiomics, 2015, 1, 196-204.	2.8	52
27	Final-state scattering in angle-resolved ultraviolet photoemission from copper. Physical Review B, 1996, 53, 10209-10216.	1.1	47
28	Hydrogen for novel materials and devices. Applied Physics A: Materials Science and Processing, 2001, 72, 245-253.	1.1	42
29	Surface and bulk properties of the Ti _y Zr _{1-y} (V _x Ni _{1-x}) ₂ alloy system as active electrode material in alkaline electrolyte. Journal of Alloys and Compounds, 1995, 231, 645-649.	2.8	39
30	Electrochemical and surface properties of iron-containing AB ₅ -type alloys. Journal of Alloys and Compounds, 1995, 231, 639-644.	2.8	38
31	Electron field emission from diamond tips prepared by ion sputtering. Applied Physics Letters, 1996, 69, 2662-2664.	1.5	38
32	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
33	AB ₂ and AB ₅ metal hydride electrodes: a phenomenological model for the cycle life. Journal of Alloys and Compounds, 1993, 200, 157-163.	2.8	35
34	Electronic properties. Topics in Applied Physics, 1988, , 139-217.	0.4	32
35	Effects of electrode compacting additives on the cycle life and high-rate dischargeability of Zr(V _{0.25} Ni _{0.75}) ₂ metal hydride electrodes in alkaline solution. Journal of Alloys and Compounds, 1994, 206, 31-38.	2.8	31
36	The protection of metallic archaeological objects using plasma polymer coatings. Surface and Coatings Technology, 2000, 125, 377-382.	2.2	30

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37	Passivation behavior of AB5-type hydrogen storage alloys for battery electrode application. Journal of Alloys and Compounds, 1995, 221, 284-290.	2.8	29
38	STM investigations with atomic resolution on the (2 Å ⁻¹ 1) monohydride natural doped diamond (100) surface. Surface Science, 1996, 369, L111-L116.	0.8	26
39	Properties of Zr(V0.25Ni0.75)2 metal hydride as active electrode material. Journal of Alloys and Compounds, 1996, 239, 175-182.	2.8	23
40	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
41	Structural- and hydriding-properties of the Zr(V0.25Ni0.75)1± (1â%±â%4) alloy system. Journal of Alloys and Compounds, 1997, 253-254, 587-589.	2.8	18
42	Influence of the alloy morphology on the kinetics of AB5-type metal hydride electrodes. Journal of Alloys and Compounds, 1999, 285, 292-297.	2.8	15
43	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
44	Prospects and Limitations of Carbon Nanotube Field Emission Electron Sources. Chimia, 2002, 56, 553-561.	0.3	13
45	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
46	Chemical Nucleation for CVD Diamond Growth. Journal of the American Chemical Society, 2001, 123, 2271-2274.	6.6	12
47	Formation of electron traps in amorphous silica. Physical Review B, 2007, 76, .	1.1	12
48	Effect of Partial Substitution of Nickel in AB2-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
49	Chemical vapor deposition of diamond growth using a chemical precursor. Applied Physics Letters, 1998, 73, 1050-1052.	1.5	11
50	Hydrogen absorption and hydride electrode behaviour of the Laves phase ZrV1.5â~xCrNi1.5. Journal of Alloys and Compounds, 1999, 291, 289-294.	2.8	11
51	Bulk and surface properties of crystalline and amorphous Zr36(V0.33Ni0.66)64 alloy as active electrode material. Journal of Alloys and Compounds, 1998, 266, 321-326.	2.8	10
52	Cobalt-free over-stoichiometric Laves phase alloys for Niâ€MH batteries. Journal of Alloys and Compounds, 2003, 350, 319-323.	2.8	10
53	Influence of electrode thickness on charge-discharge behaviour of AB5-type metal hydride electrodes. Journal of Alloys and Compounds, 1995, 221, 207-211.	2.8	9
54	ZrV1.5Ni1.5 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

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55	Hydriding properties of the Zr(Cr _{0.5} Ni _{0.5}) _{1±(1.75±3.5)} alloy system. Journal of Alloys and Compounds, 1998, 274, 294-298.	2.8	7
56	Electrochemical properties of Zr (V _x Ni _{1-3x}) ₃ as electrode material in nickel-metal hydride batteries. International Journal of Hydrogen Energy, 1999, 24, 229-233.	3.8	6
57	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
58	In situ x-ray absorption study of Zr(V _{0.29} Ni _{0.71}) ₃ hydride electrodes. Physical Review B, 2000, 61, 13647-13654.	1.1	5
59	Nanostructured graphite-hydrogen systems prepared by mechanical milling method. Molecular Crystals and Liquid Crystals, 2002, 386, 173-178.	0.4	5
60	Valence Transition in Yb Hydrides*. Zeitschrift Fur Physikalische Chemie, 1989, 163, 579-584.	1.4	4
61	Electrochemical storage of hydrogen in carbon single wall nanotubes. , 1999, , .		2
62	Cobalt-Free Over-Stoichiometric Laves Phase Alloys for Ni ²⁺ MH Batteries.. ChemInform, 2003, 34, no.	0.1	0