Valerie Paul-Boncour

List of Publications by Year
in descending order

77 papers	1,360 citations	304368 22 h-index	414034 32 g-index
77 all docs	77 docs citations	77 times ranked	546 citing authors

#	Article	IF	Citations
1	Structural and magnetic properties of magnetocaloric LaFe13â€“xSix compounds synthesized by high energy ball-milling. Intermetallics, 2010, 18, 2301-2307.	1.8	93
2	Hydrogen induced phase transitions in YMn2. Journal of Alloys and Compounds, 1998, 274, 29-37.	2.8	59
3	Structural and magnetic properties of RFe2H5 hydrides (R=Y, Er). Journal of Alloys and Compounds, 2001, 317-318, 83-87.	2.8	59
4	Hydrogenation properties and crystal structure of YMgT4 (Đ¢=Co, Ni, Cu) compounds. Journal of Alloys and Compounds, 2014, 603, 7-13.	2.8	51
5	Elaboration, Structures, and Phase Transitions for YFe2DxCompounds (x=1.3, 1.75, 1.9, 2.6) Studied by Neutron Diffraction. Journal of Solid State Chemistry, 1999, 142, 120-129.	1.4	41
6	Investigation on structural and magnetocaloric properties of LaFe13â˜Si (H,C) compounds. Journal of Solid State Chemistry, 2016, 233, 95-102.	1.4	41
7	The influence of hydrogen on the magnetic properties and electronic structures of intermetallic compounds: YFe2â€“D2 system as an example. Journal of Alloys and Compounds, 1999, 293-295, 237-242.	2.8	40
8	Ab initioapproach of the hydrogen insertion effect on the magnetic properties ofYFe2. Physical Review B, 2004, 70, .	1.1	40
9	Neutron diffraction study, magnetic properties and thermal stability of YMn2D6 synthesized under high deuterium pressure. Journal of Solid State Chemistry, 2005, 178, 356-362.	1.4	34
10	Neutron diffraction study of YMn2Dx deuterides (1 â©½ x â©½ 3.4). Journal of Alloys and Compounds, 1995, 231, 99-103.	2.8	32
11	Temperature dependence study of YMn2D4.5 by means of neutron powder diffraction. Journal of Alloys and Compounds, 1998, 274, 59-64.	2.8	31
12	The novel YMn2D6 deuteride synthesized under high pressure of gaseous deuterium. Solid State Communications, 2004, 130, 815-820.	0.9	30
13	Effect of Co substitution on hydrogenation and magnetic properties of NdMgNi4 alloy. Journal of Alloys and Compounds, 2015, 639, 526-532.	2.8	30
14	Comparison of the influence of hydrogen on the magnetic properties of RMn2 and RFe2 Laves phase compounds. Journal of Alloys and Compounds, 2004, 367, 185-190.	2.8	29
15	Giant isotope effect on the itinerant-electron metamagnetism inYFe2(HyD1â˜y)4.2. Physical Review B, 2005, 72, .	1.1	28
16	Structural study of YMn2 hydrides. Journal of Alloys and Compounds, 1995, 225, 436-439.	2.8	26
17	X-ray diffraction and extended X-ray absorption fine-structure study of RMn2 hydrides (R = Y, Gd or) Tj ETQq1 1 0.784314 rgBT /Overl	2.8	26
18	Structural and magnetic properties of ErFe2D5studied by neutron diffraction and MÂssbauer spectroscopy. Journal of Physics Condensed Matter, 2003, 15, 4349-4359.	0.7	26

#	Article	IF	Citations
19	Crystallographic Study of YFe2D3.5by X-Ray and Neutron Powder Diffraction. Journal of Solid State Chemistry, 1997, 133, 568-571.	1.4	24
20	Structural and magnetic properties of RFe2Dxdeuterides (R = Zr, Y and) studied by means of neutron diffraction and57Fe MÃ¶ssbauer spectroscopy. Journal of Physics Condensed Matter, 2005, 17, 893-908.	0.7	24
21	Multiplateau isotherms related to a multiphase behaviour in the YFe2-D2 system. Journal of Alloys and Compounds, 1997, 255, 195-202.	2.8	23
22	Investigation of compounds for magnetocaloric applications: YFe2H4.2, YFe2D4.2, and Y0.5Tb0.5Fe2D4.2. Journal of Applied Physics, 2009, 105, .	1.1	22
23	Hydrides of Laves phases intermetallic compounds synthesized under high hydrogen pressure. Solid State Ionics, 2010, 181, 306-310.	1.3	22
24	Fast synthesis of LaFe13âˆ’xSix magnetocaloric compounds by reactive Spark Plasma Sintering. Journal of Alloys and Compounds, 2015, 645, 143-150.	2.8	22
25	Phase equilibria in the Tb-Mg-Co system at 500Â°C, crystal structure and hydrogenation properties of selected compounds. Journal of Solid State Chemistry, 2015, 232, 228-235.	1.4	21
26	Phase equilibria in the Ndâ€“Mgâ€“Co system at 300 and 500ÂÂ°C, crystal structure and hydrogenation behavior of selected compounds. Intermetallics, 2017, 87, 61-69.	1.8	21
27	Deuteride absorption and desorption effects on magnetic properties of YFe2Dx. Journal of Applied Physics, 1996, 79, 4253.	1.1	20
28	Pressure-induced changes in the structural and magnetic properties of YFe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>D<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>4.2</mml:mn></mml:mrow></mml:msub></mml:math>. Physical Review B, 2011, 84, .	1.1	20
29	Relationship between H2 sorption properties and aqueous corrosion mechanisms in A2Ni7 hydride forming alloys (AÂ=ÂY, Gd or Sm). Journal of Power Sources, 2016, 326, 146-155.	4.0	20
30	Crystal structure, hydrogen absorption-desorption behavior and magnetic properties of the Nd3âˆ’xMg Co9 alloys. Journal of Alloys and Compounds, 2017, 695, 1426-1435.	2.8	19
31	Influence of H/D isotopic substitution on the first-order magnetic transition in YFe2(D1âˆ’xHx)4.2 compounds (x=0, 0.64, 1). Physica B: Condensed Matter, 2004, 350, E27-E30.	1.3	18
32	Deuterium ordering in Laves-phase deuteride YFe2D4.2. Journal of Solid State Chemistry, 2009, 182, 1907-1912.	1.4	18
33	Structural and magnetic study of new YFe2Dx compounds (0<xâ‰¤3.5). Journal of Alloys and Compounds, 1997, 253-254, 272-274.	2.8	17
34	On the origin of the giant isotopic effect of hydrogen on the magnetic properties of YFe2A4.2 (Aâ€²=â€²H, D): A high pressure study. Applied Physics Letters, 2013, 102, .	1.5	17
35	Relationship between H2 sorption, electrochemical cycling and aqueous corrosion properties in A5Ni19 hydride-forming alloys (A = Gd, Sm). Journal of Power Sources, 2018, 397, 280-287.	4.0	17
36	Local deuterium order in apparently disordered Laves phase deuteride YFe2D4.2. Journal of Solid State Chemistry, 2011, 184, 2516-2524.	1.4	15

#	ARTICLE	IF	CITATIONS
37	Interplay between crystal and magnetic structures in YFe2(HÎ±D1â^'Î±)4.2 compounds studied by neutron diffraction. Journal of Solid State Chemistry, 2017, 245, 98-109.	1.4	14
38	Tuning the Magnetocaloric Properties of the La(Fe,Si)13 Compounds by Chemical Substitution and Light Element Insertion. Magnetochemistry, 2021, 7, 13.	1.0	14
39	Local order study of YFe2Dx (0â©½xâ©½3.5) compounds by X-ray absorption and MÃ¶ssbauer spectroscopy. Physica B: Condensed Matter, 2001, 307, 277-290.	1.3	13
40	Isotope effect on the thermodynamic and structural properties of Y1â^'yRyFe2(H,D)x(Î³) compounds (R=Tb,) Tj ETQq0 0 0 rgBT /Overloc	2.8	13
41	Structural, thermal and magnetic properties of ErMn2D6synthesized under high deuterium pressure. Journal of Physics Condensed Matter, 2006, 18, 6409-6420.	0.7	12
42	Study of the multipeak deuterium thermodesorption in YFe2Dx (1.3Ââ‰ÂxÂâ‰Â4.2) by DSC, TD and in situ neutron diffraction. International Journal of Hydrogen Energy, 2009, 34, 2278-2287.	3.8	12
43	The Yâ€"Mgâ€"Co ternary system: alloys synthesis, phase diagram at 500â€¯Â°C and crystal structure of the new compounds. Journal of Alloys and Compounds, 2020, 812, 152072.	2.8	12
44	Thermodynamic and corrosion study of Sm1-Mg Ni (y = 3.5 or 3.8) compounds forming reversible hydrides. International Journal of Hydrogen Energy, 2020, 45, 11686-11694.	3.8	12
45	Hydrogenation behavior of the R4MgCo (R=Y, La, Nd, Tb) compounds. Journal of Solid State Chemistry, 2015, 229, 135-140.	1.4	11
46	Influence of deuterium absorption on structural and magnetic properties of ErFe2. Journal of Alloys and Compounds, 2003, 356-357, 195-199.	2.8	10
47	Investigation by STEM-EELS of helium density in nanobubbles formed in aged palladium tritides. Journal of Alloys and Compounds, 2021, 878, 160267.	2.8	10
48	Neutron diffraction study of YMn2D1. Physica B: Condensed Matter, 1997, 234-236, 599-601.	1.3	9
49	Large (H,D) isotope effect on the metamagnetic transition in Y0.9R0.1Fe2(H,D)4.3 compounds. Journal of Applied Physics, 2006, 99, 08F505.	1.1	9
50	High field induced magnetic transitions in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Y</mml:mi><mml:mrow><mml:mn>0.7</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">E</mml:mi><mml:msub><mml:mi mathvariant="normal">r</mml:mi><mml:mrow><mml:mn>0.3</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">F</mml:mi><mml:msub><mml:mi	1.1	9
51	TbMgNi_{4-<i>x</i>}Co_{<i>x</i>}â€"(H,D)₂ System. I: Synthesis, Hydrogenation Properties, and Crystal and Electronic Structures. Journal of Physical Chemistry C, 2020, 124, 196-204.	1.5	9
52	Metamagnetic transitions in Y0.5Er0.5Fe2D4.2 deuteride studied by high magnetic field and neutron diffraction experiments. Journal of Magnetism and Magnetic Materials, 2019, 477, 356-365.	1.0	8
53	YMn2Hx and RMn2â^'yFeyH6 (R = Y, Er) studied by Raman, infrared and inelastic neutron scattering spectroscopies. Faraday Discussions, 2011, 151, 307.	1.6	7
54	Investigation of H Sorption and Corrosion Properties of Sm2MnxNi7â^'x (0 â‰ x < 0.5) Intermetallic Compounds Forming Reversible Hydrides. Energies, 2020, 13, 3470.	1.6	7

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55	Study of phase transformations in YFe2D1.75 deuterides by in situ neutron diffraction. Physica B: Condensed Matter, 2000, 276-278, 278-279.	1.3	6
56	Studies of novel deuterides RMn₂D₆(R â€" rare earth) compressed in DAC up to 30 GPa. Journal of Physics: Conference Series, 2008, 121, 022001.	0.3	6
57	Structural and magnetic properties of DyMn₂D₆synthesized under high deuterium pressure. Journal of Physics Condensed Matter, 2009, 21, 016001.	0.7	6
58	Structural and magnetic properties of RMn2â^'Fe D6 compounds (R=Y, Er; xâ‰0.2) synthesized under high deuterium pressure. Journal of Solid State Chemistry, 2011, 184, 463-469.	1.4	6
59	Relation between the weak itinerant magnetism in A ₂Ni₇ compounds (Aâ€‰â€‰=â€‰â€‰Y, La) and their stacked crystal structures. Journal of Physics Condensed Matter, 2020, 32, 145802.	2.7	6
60	Correlations between stacked structures and weak itinerant magnetic properties of La2 â^' x Y x Ni7 compounds. Journal of Physics Condensed Matter, 2020, 32, 415804.	0.7	6
61	Structural, electronic and magnetic properties of ErFeMn and ErFeMnH4.7compounds. New Journal of Physics, 2007, 9, 271-271.	1.2	5
62	Metamagnetic transitions in RFe2(H,D)4.2 compounds (R=Y,Tb). Journal of Applied Physics, 2007, 101, 09G514.	1.1	5
63	Synthesis and crystal structure of new compounds from the Yâ€"Mgâ€"Ni system. Zeitschrift Fur Kristallographie - Crystalline Materials, 2019, 234, 19-32.	0.4	5
64	Origin of the metamagnetic transitions in Y1â^'Er Fe2(H,D)4.2 compounds. Journal of Magnetism and Magnetic Materials, 2020, 512, 167018.	1.0	5
65	Magnetic properties of Y0.7Er0.3Fe2(H,D)4.2 compounds under continuous magnetic field up to 35 tesla. Journal of Applied Physics, 2010, 107, 09E144.	1.1	4
66	Site Occupancy Determination in Th₂Zn₁₇- and TbCu₇-types Sm₂Fe_{17â€"x}Co_x Compounds using Synchrotron Resonant Diffraction. Inorganic Chemistry, 2021, 60, 1533-1541.	1.9	4
67	Magnetic transitions with magnetocaloric effects near room temperature related to structural transitions in Y0.9Pr0.1Fe2D3.5 deuteride. Journal of Applied Physics, 2021, 130, 113904.	1.1	4
68	Investigation of the phase occurrence and H sorption properties in the Y33.33Ni66.67Al (0Ââ‰ÂxÂâ‰Â33.33) system. Journal of Alloys and Compounds, 2021, 888, 161375.	2.8	4
69	Isotope effect on structural transitions in Y0.9Gd0.1Fe2(HzD1-z)4.2 compounds. Chemistry of Metals and Alloys, 2013, 6, 130-143.	0.2	4
70	3D Analysis of Helium-3 Nanobubbles in Palladium Aged under Tritium by Electron Tomography. Journal of Physical Chemistry C, 2021, 125, 25404-25409.	1.5	4
71	Structural, electronic and magnetic properties of YFeMnH5. International Journal of Hydrogen Energy, 2011, 36, 1046-1052.	3.8	3
72	Syntheses and properties of several metastable and stable hydrides derived from intermetallic compounds under high hydrogen pressure. Applied Surface Science, 2016, 388, 723-730.	3.1	3

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73	Anisotropic Nanoporous Nickel Obtained through the Chemical Dealloying of Y 2 Ni 7 for the Comprehension of Anode Surface Chemistry of Niâ€•M H Batteries. ChemElectroChem, 2019, 6, 5022-5031.	1.7	3
74	Magnetic properties of Y0.9Gd0.1Fe2D4.2 compound under continuous magnetic field up to 310 kOe. Journal of Applied Physics, 2012, 111, .	1.1	2
75	Structural and magnetic phase diagram of YMn2â^'Fe (H,D) compounds (5Ââ‰ÂyÂâ‰Â6) synthesized under high H or D gaseous pressure. Journal of Alloys and Compounds, 2017, 691, 884-892.	2.8	2
76	Phase diagram and order-disorder transitions in Y0.9Gd0.1Fe2Hx hydrides (x â‰¥ 2.9). Journal of Alloys and Compounds, 2021, , 163016.	2.8	0
77	Magnetic, structural and magnetocaloric properties of Y0.9Gd0.1Fe2Hx hydrides. Journal of Alloys and Compounds, 2022, 907, 164390.	2.8	0