

Björgvin Hjörvarsson

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8044689/publications.pdf>

Version: 2024-02-01

283
papers

5,730
citations

87843

38
h-index

143943

57
g-index

285
all docs

285
docs citations

285
times ranked

3916
citing authors

#	ARTICLE	IF	CITATIONS
1	Steering light with magnetic textures. Applied Physics Letters, 2022, 120, 032407.	1.5	0
2	Finding order in disorder: Magnetic coupling distributions and competing anisotropies in an amorphous metal alloy. APL Materials, 2022, 10, .	2.2	7
3	Influence of deuterium-induced volume changes on optical transmission in Fe/V (001) and Cr/V (001) superlattices. Physical Review B, 2022, 105, .	1.1	1
4	Simultaneous mapping of EMCD signals and crystal orientations in a transmission electron microscope. Scientific Reports, 2021, 11, 2180.	1.6	2
5	Amorphous exchange-spring magnets with crossed perpendicular and in-plane anisotropies. Physical Review B, 2021, 103, .	1.1	13
6	The impact of number of repeats N on the interlayer exchange in $[\text{Fe/MgO}]_N(001)$ superlattices. Scientific Reports, 2021, 11, 1942.	1.6	0
7	The effect of confinement on thermal fluctuations in nanomagnets. Applied Physics Letters, 2021, 118, 142407.	1.5	9
8	Temperature-induced collapse of spin dimensionality in magnetic metamaterials. Physical Review B, 2021, 104, .	1.1	6
9	Tuneable exchange-spring stiffness in amorphous magnetic trilayer structures. Journal of Physics Condensed Matter, 2021, 33, 445803.	0.7	1
10	Multiple energy scales in mesospin systems: The vertex-frustrated Saint George lattice. Physical Review Materials, 2021, 5, .	0.9	6
11	Combined Light and Electron Scattering for Exploring Proximity Effects on Hydrogen Absorption in Vanadium. Energies, 2021, 14, 8251.	1.6	0
12	The influence of diameter on the magnetic saturation in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si9.svg" \rangle \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mtext} \rangle \text{Fe} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 284 \langle \text{mml:math} \rangle [001] \text{ multilayered islands. Journal of Magnetism and Magnetic Materials, 2020, 496, 165864.}$	1.0	1
13	The impact of nanoscale compositional variation on the properties of amorphous alloys. Scientific Reports, 2020, 10, 11410.	1.6	10
14	Size effect on excess resistivity induced by hydrogen in ultra-thin vanadium systems. Physical Chemistry Chemical Physics, 2020, 22, 11609-11613.	1.3	1
15	Development of process parameters for selective laser melting of a Zr-based bulk metallic glass. Additive Manufacturing, 2020, 33, 101124.	1.7	37
16	Thermal stability and crystallization of a Zr-based metallic glass produced by suction casting and selective laser melting. Journal of Alloys and Compounds, 2020, 825, 153995.	2.8	56
17	Collective magnetic dynamics in artificial spin ice probed by ac susceptibility. Physical Review B, 2020, 101, .	1.1	12
18	Direct observation of magnetic proximity effects in amorphous exchange-spring magnets by neutron reflectometry. Physical Review Materials, 2020, 4, .	0.9	3

#	ARTICLE	IF	CITATIONS
19	Atomic resolution energy-loss magnetic chiral dichroism measurements enabled by patterned apertures. <i>Physical Review Research</i> , 2020, 2, .	1.3	7
20	The magnetization profile induced by the double magnetic proximity effect in an Fe/Fe _{0.30} V _{0.70} superlattice. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	2
21	Towards Quantitative Nanomagnetism in Transmission Electron Microscope by the Use of Patterned Apertures. <i>Microscopy and Microanalysis</i> , 2019, 25, 654-655.	0.2	1
22	Hard x-ray standing-wave photoemission insights into the structure of an epitaxial Fe/MgO multilayer magnetic tunnel junction. <i>Journal of Applied Physics</i> , 2019, 126, 075305.	1.1	9
23	Size effect on deuterium behavior in nano-sized vanadium layers. <i>Science China: Physics, Mechanics and Astronomy</i> , 2019, 62, 1.	2.0	2
24	Collective magnetization dynamics in nanoarrays of thin FePd disks. <i>Physical Review B</i> , 2019, 99, .	1.1	9
25	Quantitative EMCD by use of a double aperture for simultaneous acquisition of EELS. <i>Ultramicroscopy</i> , 2019, 196, 192-196.	0.8	14
26	Giant magnetic proximity effect in amorphous layered magnets. <i>Physical Review Materials</i> , 2019, 3, .	0.9	10
27	On Surface Losses in Direct Metal Laser Sintering Printed Millimeter and Submillimeter Waveguides. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2018, 39, 535-545.	1.2	12
28	Interaction modifiers in artificial spin ices. <i>Nature Physics</i> , 2018, 14, 375-379.	6.5	76
29	Limitations of the kinematic approximation in neutron reflectivity measurements for the analysis of bilayers. <i>Journal of Applied Crystallography</i> , 2018, 51, 1556-1563.	1.9	0
30	Double magnetic proximity in $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mi} \text{Fe} \langle \text{mml:mi} \langle \text{mml:mo} \rangle \langle \text{mml:mathvariant="normal"} \rangle \text{V} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 0.68 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ superlattices. <i>Physical Review B</i> , 2018, 98, .	1.1	7
31	Sequential magnetic switching in Fe/MgO(001) superlattices. <i>Physical Review B</i> , 2018, 97, .	1.1	5
32	Magnetic order and energy-scale hierarchy in artificial spin-ice structures. <i>Physical Review B</i> , 2018, 98, .	1.1	16
33	Magnetic anisotropy in permalloy: Hidden quantum mechanical features. <i>Physical Review B</i> , 2018, 97, .	1.1	12
34	Ising-like behaviour of mesoscopic magnetic chains. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 365301.	0.7	14
35	Hydrogen Concentration in Photovoltaic a-Si:H Annealed at Different Temperatures Measured by Neutron Reflectometry. <i>IEEE Journal of Photovoltaics</i> , 2018, 8, 1098-1101.	1.5	0
36	Influence of site occupancy on diffusion of hydrogen in vanadium. <i>Physical Review B</i> , 2017, 95, .	1.1	8

#	ARTICLE	IF	CITATIONS
37	Diffusion of hydrogen in ultra-thin V(001) layers. Journal of Alloys and Compounds, 2017, 723, 484-487.	2.8	9
38	Experimental observation of hysteresis in a coherent metal-hydride phase transition. Journal of Physics Condensed Matter, 2017, 29, 495701.	0.7	5
39	Crystal perfection by strain engineering: The case of Fe/V (001). Thin Solid Films, 2017, 636, 608-614.	0.8	14
40	Concentration dependence of hydrogen diffusion in clamped vanadium (001) films. Journal of Physics Condensed Matter, 2017, 29, 045402.	0.7	2
41	Finite size effects: deuterium diffusion in nm thick vanadium layers. New Journal of Physics, 2017, 19, 123004.	1.2	6
42	Thermally induced magnetic relaxation in square artificial spin ice. Scientific Reports, 2016, 6, 37097.	1.6	18
43	Enhanced magnetocaloric properties of FeZr amorphous films by C ion implantation. Materials Letters, 2016, 175, 5-8.	1.3	27
44	Discrete Layer-by-Layer Magnetic Switching in Fe/MgO Heterostructures. Physical Review Letters, 2016, 116, 077201.	1.5	21
45	Magnetically driven anisotropic structural changes in the atomic laminate Mn/GaC . Physical Review B, 2016, 93, 114407.	1.1	44
46	Hydrogen in vanadium: Site occupancy and isotope effects. Physical Review B, 2016, 93, 114407.	1.1	12
47	A new look on the two-dimensional Ising model: thermal artificial spins. New Journal of Physics, 2016, 18, 023008.	1.2	37
48	Long-range magnetic interactions and proximity effects in an amorphous exchange-spring magnet. Nature Communications, 2016, 7, ncomms11931.	5.8	62
49	Detection of magnetic circular dichroism with subnanometer convergent electron beams. Physical Review B, 2016, 94, 114407.	1.1	32
50	Neutron Reflectometry. Neutron Scattering Applications and Techniques, 2016, , 115-158.	0.2	4
51	Magnetic leverage effects in amorphous $\text{SmCo}/\text{CoAlZr}$ heterostructures. Applied Physics Letters, 2015, 107, 102401.	1.5	10
52	Quantitative analysis of magnetic spin and orbital moments from an oxidized iron (110) surface using electron magnetic circular dichroism. Scientific Reports, 2015, 5, 13012.	1.6	27
53	Effect of uniaxial strain on the site occupancy of hydrogen in vanadium from density-functional calculations. Scientific Reports, 2015, 5, 10301.	1.6	16
54	Recent upgrade of the polarized neutron reflectometer Super ADAM. Neutron News, 2015, 26, 25-26.	0.1	28

#	ARTICLE	IF	CITATIONS
55	Arrays of elliptical Fe(001) nanoparticles: Magnetization reversal, dipolar interactions, and effects of finite array sizes. <i>Physical Review B</i> , 2015, 92, .	1.1	5
56	Magnetic properties of amorphous Fe ₉₃ Zr ₇ films: Effect of light ion implantation. <i>Journal of Applied Physics</i> , 2015, 117, 143903.	1.1	12
57	Absorption kinetics and hydride formation in magnesium films: Effect of driving force revisited. <i>Acta Materialia</i> , 2015, 85, 279-289.	3.8	51
58	Thermal stability of photovoltaic a-Si:H determined by neutron reflectometry. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	5
59	Origin of the anomalous temperature dependence of coercivity in soft ferromagnets. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	12
60	Finite-Size Effects: Hydrogen in $\text{Fe}/\text{V}(001)$ Superlattices. <i>Physical Review Letters</i> , 2014, 113, 046103.	2.9	28
61	Proximity effects on H absorption in ultrathin V layers. <i>Physical Review B</i> , 2014, 90, .	1.1	5
62	Uniaxial anisotropy and its manipulation in amorphous Co ₆₈ Fe ₂₄ Zr ₈ thin films (invited). <i>Journal of Applied Physics</i> , 2014, 115, 172605.	1.1	8
63	Reversed interface effects in amorphous FeZr/AlZr multilayers. <i>Physical Review B</i> , 2014, 90, .	1.1	6
64	Strain enhanced magnetic anisotropy in SmCo/BaTiO ₃ multiferroic heterostructures. <i>Journal of Applied Physics</i> , 2014, 115, 053905.	1.1	10
65	Magnetostrictive properties of amorphous SmCo thin films with imprinted anisotropy. <i>Physical Review B</i> , 2014, 89, .	1.1	10
66	Proximity effects on dimensionality and magnetic ordering in Pd/Fe/Pd trilayers. <i>Physical Review B</i> , 2014, 90, .	1.1	24
67	Mechanism of tailored magnetic anisotropy in amorphous Co ₆₈ Fe ₂₄ Zr ₈ thin films. <i>Applied Physics Letters</i> , 2014, 104, 072409.	1.5	9
68	Growth of polycrystalline Ag/Ni multilayers at room temperature. <i>Thin Solid Films</i> , 2014, 558, 184-188.	0.8	0
69	Antisymmetric magnetoresistance in SmCo ₅ amorphous films with imprinted in-plane magnetic anisotropy. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	6
70	Landau theory for the phase transitions of interstitial hydrogen in strained vanadium. <i>Physical Review B</i> , 2014, 89, .	1.1	2
71	Thermal transitions in nano-patterned XY-magnets. <i>Applied Physics Letters</i> , 2014, 105, 042409.	1.5	23
72	Giant magnetic domains in amorphous SmCo thin films. <i>Physical Review B</i> , 2014, 89, .	1.1	12

#	ARTICLE	IF	CITATIONS
73	The effect of microstructure on the hydrogenation of Mg/Fe thin film multilayers. International Journal of Hydrogen Energy, 2014, 39, 17092-17103.	3.8	17
74	Hysteresis-free switching between vortex and collinear magnetic states. New Journal of Physics, 2014, 16, 053002.	1.2	16
75	Thermal fluctuations in artificial spin ice. Nature Nanotechnology, 2014, 9, 514-519.	15.6	136
76	"m=1" coatings for neutron guides. Journal of Physics: Conference Series, 2014, 528, 012005.	0.3	3
77	Reflectivity Studies of Magnetic Heterostructures. Journal of Surfaces and Interfaces of Materials, 2014, 2, 24-32.	0.5	4
78	Tuning magnetic properties by hydrogen implantation in amorphous $\text{Fe}_{100-x}\text{V}_x$ thin films. Journal of Magnetism and Magnetic Materials, 2013, 346, 138-141.	1.0	10
79	Temperature dependence of magnetic properties in weakly exchange coupled Fe/V superlattices. Journal of Magnetism and Magnetic Materials, 2013, 341, 142-147.	1.0	10
80	Tailoring magnetism at the nanometer scale in SmCo_5 amorphous films. Journal of Physics Condensed Matter, 2013, 25, 416004.	0.7	8
81	Hydrogen induced changes in the optical properties of Pd capped V thin films. Journal of Alloys and Compounds, 2013, 580, S114-S118.	2.8	6
82	Nonlocal nonlinear magneto-optical response of a magnetoplasmonic crystal. Physical Review B, 2013, 88, .	1.1	25
83	Tunable giant magnetic anisotropy in amorphous SmCo thin films. Applied Physics Letters, 2013, 102, .	1.5	36
84	Magnetic Self-Organized Atomic Laminate from First Principles and Thin Film Synthesis. Physical Review Letters, 2013, 110, 195502.	2.9	146
85	Soft Room-Temperature Ferromagnetism of Carbon-Implanted Amorphous $\text{Fe}_{93}\text{Zr}_7$ Films. Applied Physics Express, 2013, 6, 053001.	1.1	15
86	Anisotropic Magnetostriction and Domain Wall Motion in $\text{Sm}_{10}\text{Co}_{90}$ Amorphous Films. Applied Physics Express, 2013, 6, 053004.	1.1	8
87	SuperADAM: Upgraded polarized neutron reflectometer at the Institut Laue-Langevin. Review of Scientific Instruments, 2013, 84, 025112.	0.6	46
88	Strain induced changes in magnetization of amorphous $\text{Co}_{95}\text{Zr}_5$ based multiferroic heterostructures. AIP Advances, 2013, 3, .	0.6	12
89	Using light transmission to watch hydrogen diffuse. Nature Communications, 2012, 3, 892.	5.8	32
90	Temperature- and hydrogen-induced changes in the optical properties of Pd capped V thin films. Physica Scripta, 2012, 86, 065702.	1.2	3

#	ARTICLE	IF	CITATIONS
91	Hydrogen distribution in Nb/Ta superlattices. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 255306.	0.7	5
92	Thermalized ground state of artificial kagome spin ice building blocks. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	57
93	Hydrogen site occupancy and strength of forces in nanosized metal hydrides. <i>Physical Review B</i> , 2012, 85, .	1.1	28
94	X-ray resonant magnetic scattering from patterned multilayers. <i>Physical Review B</i> , 2012, 86, .	1.1	6
95	Effect of ferromagnetic proximity on critical behavior. <i>Physical Review B</i> , 2012, 85, .	1.1	12
96	Influence of the magnetic field on the plasmonic properties of transparent Ni anti-dot arrays. <i>Applied Physics Letters</i> , 2012, 101, 063107.	1.5	22
97	Melting artificial spin ice. <i>New Journal of Physics</i> , 2012, 14, 035009.	1.2	115
98	Prediction and Hydrogen Acceleration of Ordering in Iron-Vanadium Alloys. <i>Physical Review Letters</i> , 2012, 108, 215503.	2.9	15
99	Temperature dependence of the electrical resistivity and electronic structure of amorphous Fe _{100-x} Zr _x films and multilayers. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 495402.	0.7	3
100	Finite-size effects in amorphous Fe ₉₀ Zr ₁₀ /Al ₇₅ Zr ₂₅ multilayers. <i>Physical Review B</i> , 2012, 85, .	1.1	19
101	Density, elastic and magnetic properties of Co-Fe-Ta-Si metallic glasses by theory and experiment. <i>Scripta Materialia</i> , 2012, 66, 765-768.	2.6	15
102	<i>Ab initio</i> molecular dynamics model for density, elastic properties and short range order of Co-Fe-Ta-B metallic glass thin films. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 475401.	0.7	31
103	Atomic and electronic structure of amorphous Al-Zr alloy films. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 265503.	0.7	1
104	Surface plasmons and magneto-optic activity in hexagonal Ni anti-dot arrays. <i>Optics Express</i> , 2011, 19, 23867.	1.7	59
105	Reciprocal Space Signals Arising from Interference of Core-Loss Electrons in the EMCD Geometry. <i>Microscopy and Microanalysis</i> , 2011, 17, 812-813.	0.2	0
106	TOF-OFF: A method for determining focal positions in tightly focused free-electron laser experiments by measurement of ejected ions. <i>High Energy Density Physics</i> , 2011, 7, 336-342.	0.4	8
107	Tailored magnetic anisotropy in an amorphous trilayer. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	7
108	Saturated ablation in metal hydrides and acceleration of protons and deuterons to keV energies with a soft-x-ray laser. <i>Physical Review E</i> , 2011, 83, 016403.	0.8	24

#	ARTICLE	IF	CITATIONS
109	Influence of plural scattering on the quantitative determination of spin and orbital moments in electron magnetic chiral dichroism measurements. Physical Review B, 2011, 83, . Two-dimensional $\langle XY \rangle$ -like amorphous Co	1.1	24
110	like amorphous Co $\langle XY \rangle$ -like amorphous Co $\langle XY \rangle$ -like amorphous Co	1.1	17
111	Violation of Hund's third rule in structurally disordered ferromagnets. Physical Review B, 2011, 84, .	1.1	9
112	Experimental realization of amorphous two-dimensional XY magnets. Physical Review B, 2011, 84, .	1.1	7
113	Influence of the range of interactions in thin magnetic structures. European Physical Journal B, 2010, 77, 367-371.	0.6	4
114	Reciprocal and real space maps for EMCD experiments. Ultramicroscopy, 2010, 110, 1380-1389.	0.8	38
115	Structural and magnetic properties of multilayers. Journal of Crystal Growth, 2010, 312, 580-586.	0.7	10
116	Quantitative magnetic measurements with transmission electron microscope. Journal of Magnetism and Magnetic Materials, 2010, 322, 1478-1480.	1.0	12
117	Structural stability and oxidation resistance of amorphous Zr-Al alloys. Journal of Nuclear Materials, 2010, 401, 38-45.	1.3	14
118	Highly amorphous Fe ₉₀ Zr ₁₀ thin films, and the influence of crystallites on the magnetism. Thin Solid Films, 2010, 519, 404-409.	0.8	36
119	Deuterium-induced volume expansion in Fe _{0.5} V _{0.5} superlattices. Physical Review B, 2010, 82, .	1.1	11
120	Magnon softening in a ferromagnetic monolayer: A first-principles spin dynamics study. Physical Review B, 2010, 81, .	1.1	39
121	Tunneling and charging effects in discontinuous superparamagnetic Ni $\langle XY \rangle$ -like amorphous Co	1.1	11
122	Mg/Ti multilayers: Structural and hydrogen absorption properties. Physical Review B, 2010, 81, .	1.1	52
123	Influence of boundaries on magnetic ordering in Fe/V superlattices. Physical Review B, 2010, 81, .	1.1	12
124	Significance of Self-Trapping on Hydrogen Diffusion. Physical Review Letters, 2010, 105, 185901.	2.9	13
125	Hydrogen-vanadium system in thin films: Effect of film thickness. Physical Review B, 2010, 82, .	1.1	14
126	Combined light and electron scattering for exploring hydrogen in thin metallic films. Applied Physics Letters, 2010, 97, 251910.	1.5	24

#	ARTICLE	IF	CITATIONS
127	Influence of titanium and vanadium on the hydrogen transport through amorphous alumina films. Journal of Alloys and Compounds, 2010, 494, 239-244.	2.8	1
128	Dimensionality and confinement effects in $\hat{\Gamma}$ -doped Pd(Fe) layers. Journal of Physics Condensed Matter, 2010, 22, 236004.	0.7	13
129	Magnetic structure and diffracted magneto-optics of patterned amorphous multilayers. Physical Review B, 2010, 82, .	1.1	9
130	Spin and orbital moment in amorphous $\langle \text{Co} \rangle$. Physical Review B, 2009, 80, .	1.1	168
131	Influence of the distribution of the inherent ordering temperature on the ordering in layered magnets. Physical Review B, 2009, 79, .	1.1	13
132	Transition from spin-density-wave to layered antiferromagnetic state induced by hydrogen as a test for the origin of spin-density waves in chromium. Physical Review B, 2009, 80, .	1.1	9
133	Quantitative Magnetic Information from Reciprocal Space Maps in Transmission Electron Microscopy. Physical Review Letters, 2009, 102, 037201.	2.9	61
134	Fine-tuning of the spin-density-wave state in Cr/V heterostructures via hydrogen uptake. Journal of Physics Condensed Matter, 2009, 21, 336004.	0.7	12
135	The influence of interlayer exchange coupling on magnetic ordering in Fe/V superlattices. Journal of Magnetism and Magnetic Materials, 2009, 321, 1214-1220.	1.0	5
136	Influence of vanadium spin-polarization on the dissolution of hydrogen in vanadium. Physical Review B, 2009, 79, .	1.1	2
137	Imprinting layer specific magnetic anisotropies in amorphous multilayers. Journal of Applied Physics, 2009, 106, 023918.	1.1	37
138	Competing anisotropies in bcc Fe ₈₁ Ni ₁₉ /Co(001) superlattices. Applied Physics Letters, 2009, 94, .	1.5	5
139	Temperature dependence of the magnetic interlayer ordering in Fe(3) / V (14)Hx (001) superlattices. Superlattices and Microstructures, 2008, 43, 101-111.	1.4	2
140	Local atomic structure of Fe-Ni/V multilayer nanostructures: EXAFS spectroscopy and synchrotron radiation data. Journal of Structural Chemistry, 2008, 49, 129-137.	0.3	0
141	Oxidation of epitaxial Y(0001) films. Applied Surface Science, 2008, 254, 3184-3190.	3.1	3
142	Stability limits of superlattice growth: The case of Cr/V (001). Thin Solid Films, 2008, 516, 8468-8472.	0.8	9
143	The influence of amorphous Al ₂ O ₃ coating on hydrogen uptake of materials. Journal of Alloys and Compounds, 2008, 464, L13-L16.	2.8	18
144	Modern Growth Problems and Growth Techniques. , 2008, , 1-44.		0

#	ARTICLE	IF	CITATIONS
145	Effects of strain on magnetic anisotropy in Fe- and Co-based heterostructures. Phase Transitions, 2008, 81, 679-701.	0.6	7
146	Structural coherence and layer perfection in Fe/MgO multilayers. Journal of Physics Condensed Matter, 2008, 20, 055212.	0.7	8
147	The influence of weak links on magnetic ordering in layered structures. Europhysics Letters, 2008, 81, 17008.	0.7	3
148	Superconducting spin valves based on epitaxial Fe/V superlattices. Physical Review B, 2008, 78, .	1.1	51
149	Magnetic force microscopy of helical states in multilayer nanomagnets. Journal of Applied Physics, 2008, 103, 073916.	1.1	24
150	Examination of the reliability of x-ray techniques for determining hydrogen-induced volume changes. Physical Review B, 2008, 78, .	1.1	24
151	Magnetic anisotropy and evolution of ground-state domain structures in bcc $\text{Fe}_{1-x}\text{Mn}_x$ multilayers. Physical Review B, 2008, 78, .	1.1	6
152	EMCD in the TEM – Optimization of signal acquisition and data evaluation. Microscopy and Microanalysis, 2008, 14, 1148-1149.	0.2	3
153	Morphology of amorphous $\text{Fe}_{91}\text{Zr}_9$ Al_2O_3 multilayers: Dewetting and crystallization. Physical Review B, 2007, 75, .	1.1	13
154	Onset of spin-density-wave antiferromagnetism in $\text{Cr}_x\text{V}_{1-x}$ multilayers. Physical Review B, 2007, 76, .	1.1	11
155	Remote control of the Fe magnetic moment in magnetic heterostructures. Europhysics Letters, 2007, 79, 37003.	0.7	21
156	Resistivity changes in $\text{Cr}/\text{V}(\text{O}_{0.1})$ superlattices during hydrogen absorption. Journal of Alloys and Compounds, 2007, 446-447, 526-529.	2.8	8
157	Dimensionality crossover in the induced magnetization of Pd layers. Journal of Physics Condensed Matter, 2007, 19, 246213.	0.7	25
158	Magnetic and transport properties of $\text{Ni}_{81}\text{Fe}_{19}$ Al_2O_3 granular multilayers approaching the superparamagnetic limit. Journal of Applied Physics, 2007, 101, 073907.	1.1	13
159	X-ray scattering from two-dimensionally patterned magnetic thin film nanoscale arrays. Superlattices and Microstructures, 2007, 41, 163-167.	1.4	1
160	Stability of the induced magnetic V moment in Fe/V superlattices upon Hydrogen loading. Superlattices and Microstructures, 2007, 41, 127-131.	1.4	6
161	The effect of strain and interfaces on the orbital moment in Fe/V superlattices. Journal of Magnetism and Magnetic Materials, 2007, 313, 230-235.	1.0	10
162	Experimental study of the feasibility of a spin valve based on superconductor/ferromagnet proximity effect. Journal of Experimental and Theoretical Physics, 2007, 105, 227-234.	0.2	1

#	ARTICLE	IF	CITATIONS
163	Reversible structural change and thermodynamic properties of hydrogen in thin vanadium films. <i>Physical Review B</i> , 2007, 75, .	1.1	26
164	Hydrogen assisted growth of Fe/V superlattices. <i>Journal of Physics Condensed Matter</i> , 2006, 18, L441-L445.	0.7	9
165	Study of the possibility of realization of a spin valve on the basis of superconductor/ferromagnet multilayers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 1257-1267.	0.8	0
166	Thermal stability of Fe/Mo layers. <i>Thin Solid Films</i> , 2006, 496, 417-419.	0.8	2
167	Structural and optical properties of Mg _x Al _{1-x} Hy gradient thin films: a combinatorial approach. <i>Applied Physics A: Materials Science and Processing</i> , 2006, 84, 77-85.	1.1	34
168	Influence of hydrogen on properties of rare-earth hydrides studied by resonant inelastic x-ray scattering spectroscopy. <i>AIP Conference Proceedings</i> , 2006, , .	0.3	2
169	Competing Exchange Interactions in Magnetic Multilayers. <i>Physical Review Letters</i> , 2006, 96, 057205.	2.9	33
170	On the realization of artificial XY spin chains. <i>Journal of Physics Condensed Matter</i> , 2005, 17, L27-L33.	0.7	13
171	Oscillatory exchange coupling in the two-dimensional limit. <i>Journal of Physics Condensed Matter</i> , 2005, 17, L477-L483.	0.7	14
172	Proximity effect of vanadium on strain and spin-density waves in thin Cr films. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 286, 425-431.	1.0	4
173	Dynamic magnetic properties of $\text{Cr}(\text{Mn})_2$ thin films. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 286, 432-436.	1.0	6
174	Mean-field-like structural phase transition of H in Fe/V(001) superlattices. <i>Journal of Physics Condensed Matter</i> , 2005, 17, 2073-2084.	0.7	10
175	Reorientation of spin-density waves in Cr films induced by proximity effect of vanadium. <i>Journal of Physics Condensed Matter</i> , 2005, 17, 3143-3152.	0.7	4
176	Structural and magnetic properties of Al ₂ O ₃ /Ni ₈₁ Fe ₁₉ thin films: from superparamagnetic nanoparticles to ferromagnetic multilayers. <i>Journal of Physics Condensed Matter</i> , 2005, 17, 5027-5036.	0.7	11
177	Growth and hydrogen uptake of Mg _{1-x} Y thin films. <i>Journal of Applied Physics</i> , 2005, 97, 104903.	1.1	18
178	Effect of biaxial elastic constraints on H ² interactions in ultrathin vanadium. <i>Physical Review B</i> , 2005, 71, .	1.1	11
179	Temperature-dependent magnetization and susceptibility of Fe _{1-x} V _x superlattices. <i>Physical Review B</i> , 2005, 71, .	1.1	21
180	Superconducting Spin Valve Effect of a V Layer Coupled to an Antiferromagnetic [Fe/V] Superlattice. <i>Physical Review Letters</i> , 2005, 95, 097003.	2.9	67

#	ARTICLE	IF	CITATIONS
181	Solubility of hydrogen at low concentrations in thin epitaxial Nb(110) films. Journal of Physics Condensed Matter, 2004, 16, 1165-1174.	0.7	8
182	Hydrogen uptake and optical properties of sputtered Mg ¹⁰⁰ Ni thin films. Journal of Physics Condensed Matter, 2004, 16, 7649-7662.	0.7	21
183	Magnetization and domain structure of bccFe ₈₁ Ni ₁₉ /Co(001) superlattices. Physical Review B, 2004, 69, .	1.1	37
184	Magnetic moments and exchange interactions in Fe _{0.82} Ni _{0.18} /Vbcc (001) multilayers. Physical Review B, 2004, 70, .	1.1	13
185	Proximity effect of vanadium on spin-density-wave magnetism in Cr films. Physical Review B, 2004, 70, .	1.1	11
186	On the sharpness of the interfaces in metallic multilayers. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 4742-4745.	3.3	42
187	Enhanced magnetic moment at the interfaces in Fe ₈₁ Ni ₁₉ /Co superlattices. Journal of Magnetism and Magnetic Materials, 2004, 277, 228-235.	1.0	7
188	Origin of uniaxial in-plane magnetic anisotropy in Fe ₈₁ Ni ₁₉ /Co superlattices. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1247-1248.	1.0	3
189	Electronic structure of Gd hydrides studied by resonant Inelastic soft X-ray scattering. Journal of Electron Spectroscopy and Related Phenomena, 2004, 137-140, 487-489.	0.8	0
190	Magnetic phase diagram of Fe _{0.82} Ni _{0.18} /V(001) superlattices. Journal of Magnetism and Magnetic Materials, 2004, 280, 346-357.	1.0	3
191	Magnetism of Fe/V and Fe/Co multilayers. Journal of Physics Condensed Matter, 2003, 15, S599-S615.	0.7	28
192	Domain structure of circular and ring magnets. Journal of Magnetism and Magnetic Materials, 2003, 258-259, 348-351.	1.0	13
193	Adjustable magnetic interactions: the use of hydrogen as a tuning agent. Journal of Alloys and Compounds, 2003, 356-357, 160-168.	2.8	12
194	Magnetic properties of submicron permalloy elements: Effects of heat treatment. Journal of Applied Physics, 2003, 93, 7334-7336.	1.1	4
195	Anomalous neutron Compton scattering cross sections in niobium and palladium hydrides. Physical Review B, 2003, 67, .	1.1	48
196	Interface alloying and tunability of magnetic structure with hydrogen in Fe/V multilayers. Physical Review B, 2003, 68, .	1.1	26
197	Magnetic Superlattices with Variable Interlayer Exchange Coupling: A New Approach for the Investigation of Low-Dimensional Magnetism. Physical Review Letters, 2003, 91, 037202.	2.9	52
198	Growth and characterization of Fe _{0.82} Ni _{0.18} /V(001) superlattices. Journal of Physics Condensed Matter, 2003, 15, 625-633.	0.7	7

#	ARTICLE	IF	CITATIONS
199	Role of hydrogen for the elastic properties of alumina thin films. Applied Physics Letters, 2002, 80, 1144-1146.	1.5	68
200	H-H interactions in Nb/W(110) superlattices. Physical Review B, 2002, 66, .	1.1	9
201	Magnetic ordering in a weakly coupled Fe/V(001) superlattice. Physical Review B, 2002, 66, .	1.1	8
202	Gadolinium trihydride—A new magnetoresistive semiconductor. Europhysics Letters, 2002, 58, 442-447.	0.7	9
203	On the magnetic ordering in interleaved Fe(3 ML)/V(yML)/Fe(2 ML)/V(yML) superlattices. Journal of Physics Condensed Matter, 2002, 14, 12575-12583.	0.7	4
204	Tunability of the interlayer exchange coupling. Journal Physics D: Applied Physics, 2002, 35, 2377-2383.	1.3	15
205	Hydrogen uptake of thin epitaxial vanadium (001) films. Journal of Alloys and Compounds, 2002, 334, 14-19.	2.8	23
206	Hydrogen in carbon nanostructures. Journal of Alloys and Compounds, 2002, 330-332, 670-675.	2.8	27
207	Magnetic properties of interleaved Fe(3ML)/V(xML)/Fe(2ML)/V(xML) superlattices. Journal of Magnetism and Magnetic Materials, 2002, 240, 472-474.	1.0	2
208	Evolution of atomic magnetic moments in Fe/V multilayers with hydrogen loading. Journal of Magnetism and Magnetic Materials, 2002, 240, 481-484.	1.0	17
209	Short-lived proton entanglement in yttrium hydrides. Applied Physics A: Materials Science and Processing, 2002, 74, s1203-s1205.	1.1	9
210	Magnetic properties and coupling in Fe(2ML)/V(xML) (x>5) superlattices. Journal of Magnetism and Magnetic Materials, 2002, 246, 54-61.	1.0	10
211	Deuterium in 001-oriented Mo _{0.5} V _{0.5} /V: Density profile on the atomic level. Physical Review B, 2002, 66, .	1.1	7
212	SHORT-LIVED PROTON ENTANGLEMENT IN YTTRIUM HYDRIDES. , 2002, , .		0
213	Optical properties of intrinsic and doped a-Si:H films grown by d.c. magnetron sputter deposition. Thin Solid Films, 2001, 394, 255-262.	0.8	8
214	Hydrogen induced change of the atomic magnetic moments in Fe/V-superlattices. Journal of Magnetism and Magnetic Materials, 2001, 225, 373-380.	1.0	35
215	Phase transitions of hydrogen in quasi-two-dimensional vanadium lattices. Journal of Physics Condensed Matter, 2001, 13, 1685-1698.	0.7	13
216	A magnetoresistive self-assembled network of Gd ₃ Co:H nanowires. Journal of Physics Condensed Matter, 2001, 13, L855-L860.	0.7	1

#	ARTICLE	IF	CITATIONS
217	Hydrogen-induced changes of the local structure in Fe/V (001) superlattices. <i>Physical Review B</i> , 2001, 63, .	1.1	17
218	Anomalous neutron Compton scattering in metallic hydrides: new experiments. <i>Physica B: Condensed Matter</i> , 2000, 276-278, 824-825.	1.3	23
219	Characteristics of Albany's compact high resolution magnetic spectrometer. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2000, 161-163, 202-206.	0.6	15
220	Structural changes to epitaxial (0001) holmium layers during hydrogen loading. <i>Journal Physics D: Applied Physics</i> , 2000, 33, 894-900.	1.3	30
221	Growth, structure, and mechanical properties of CN _x H _y films deposited by dc magnetron sputtering in N ₂ /Ar/H ₂ discharges. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2000, 18, 2349.	0.9	48
222	Structural symmetry of YD ₃ epitaxial thin films. <i>Physical Review B</i> , 2000, 61, 12701-12704.	1.1	34
223	Magnetic-field-dependent plasma composition of a pulsed arc in a high-vacuum ambient. <i>Applied Physics Letters</i> , 2000, 76, 1531-1533.	1.5	18
224	Gigantic resistivity and band gap changes in GdO _y H _x thin films. <i>Applied Physics Letters</i> , 2000, 76, 2056-2058.	1.5	26
225	Anomalous neutron Compton scattering in Nb hydride: Indications of proton correlations. <i>Europhysics Letters</i> , 1999, 46, 617-623.	0.7	73
226	Probing the local electronic structure in the H induced metal - insulator transition of Y. <i>Journal of Physics Condensed Matter</i> , 1999, 11, L119-L125.	0.7	16
227	Effects of varying compressive biaxial strain on the hydrogen uptake of thin vanadium (001) layers. <i>Journal of Physics Condensed Matter</i> , 1999, 11, 6669-6677.	0.7	13
228	Temporal development of the plasma composition of a pulsed aluminum plasma stream in the presence of oxygen. <i>Applied Physics Letters</i> , 1999, 75, 612-614.	1.5	32
229	Composition, structure, and dielectric tunability of epitaxial SrTiO ₃ thin films grown by radio frequency magnetron sputtering. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1999, 17, 564-570.	0.9	41
230	On the effect of hydrogen incorporation in strontium titanate layers grown by high vacuum magnetron sputtering. <i>Applied Physics Letters</i> , 1999, 75, 3476-3478.	1.5	65
231	Low temperature transport of Al into and through copper starting with Cu/Al/SiO ₂ bilayers. <i>Journal of Applied Physics</i> , 1999, 85, 1487-1495.	1.1	7
232	Hydrogen affinity at Cr/Cr ₂ O ₃ metal/oxide interfaces studied by the ¹ H(¹⁵ N, ¹² C) nuclear resonance reaction. <i>Vacuum</i> , 1999, 52, 291-294.	1.6	4
233	Temperature stable Pd ohmic contacts to p-type 4H-SiC formed at low temperatures. <i>IEEE Transactions on Electron Devices</i> , 1999, 46, 605-611.	1.6	26
234	Hydrogen induced changes of the interlayer coupling in Fe(3)/V(x) superlattices (x=11-16). <i>Journal of Magnetism and Magnetic Materials</i> , 1999, 192, 238-246.	1.0	39

#	ARTICLE	IF	CITATIONS
235	Hydrogen in thin epitaxial metal films and superlattices: structure, magnetism, and transport. Journal of Magnetism and Magnetic Materials, 1999, 198-199, 264-266.	1.0	6
236	Anisotropic behaviour of the magnetoresistance in single crystalline iron films. Journal of Magnetism and Magnetic Materials, 1999, 195, 1-8.	1.0	26
237	Hydrogen uptake in alumina thin films synthesized from an aluminum plasma stream in an oxygen ambient. Applied Physics Letters, 1999, 74, 200-202.	1.5	73
238	Thermodynamic properties of hydrogen in Mo/V (110) superlattices: the dependence on crystallographic orientation. Journal of Alloys and Compounds, 1999, 285, 21-26.	2.8	4
239	Compact broad range magnetic spectrometer for use in ion beam analysis. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 1177-1182.	0.6	26
240	Antiferromagnetic coupling and giant magnetoresistance in Fe/V(001) superlattices. Journal of Magnetism and Magnetic Materials, 1998, 186, 154-160.	1.0	35
241	Structure and magnetic properties of Fe/V (110) superlattices. Physical Review B, 1998, 57, 3531-3538.	1.1	20
242	High rate reactive dc magnetron sputter deposition of Al ₂ O ₃ films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 639-643.	0.9	42
243	The orientation dependence of the hydrogen distribution within Mo/V (110) and (001) multilayered artificial superlattices. Journal of Physics Condensed Matter, 1997, 9, 73-85.	0.7	7
244	The temperature-dependent in- and out-of-plane magnetic anisotropies in superlattices. Journal of Physics Condensed Matter, 1997, 9, 10581-10593.	0.7	26
245	Reversible Tuning of the Magnetic Exchange Coupling in Fe/V (001) Superlattices Using Hydrogen. Physical Review Letters, 1997, 79, 901-904.	2.9	161
246	Hydrogen-induced lattice expansion of vanadium in a Fe/V (001) single-crystal superlattice. Physical Review B, 1997, 55, 15905-15911.	1.1	49
247	Hydrogen-induced changes of the electronic states in ultrathin single-crystal vanadium layers. Physical Review B, 1997, 55, 12914-12917.	1.1	14
248	<title>Cerium-containing counter electrodes for transparent electrochromic devices</title>. , 1997, , .		10
249	Transparent ion intercalation films of Zrâ€Ce oxide. Journal of Applied Physics, 1997, 81, 2024-2026.	1.1	44
250	Metallic superlattices: quasi two-dimensional playground for hydrogen. Journal of Alloys and Compounds, 1997, 253-254, 51-57.	2.8	36
251	Adsorption of hydrogen on the Pt(111) surface from low-energy recoil scattering. Surface Science, 1997, 387, 320-327.	0.8	33
252	Influence of compressive biaxial strain on the hydrogen uptake of ultrathin single-crystal vanadium layers. Physical Review B, 1997, 55, 1774-1781.	1.1	69

#	ARTICLE	IF	CITATIONS
253	Growth of epitaxial (001) superlattice films. Vacuum, 1997, 48, 483-489.	1.6	120
254	Magnetic anisotropy and exchange coupling in $\text{Fe}_x\text{V}_{1-x}$ (001) superlattices on $\text{MgO}(001)$. Journal of Magnetism and Magnetic Materials, 1997, 170, 57-66.	1.0	51
255	Positive muon diffusion in mixed Nb hydrides, NbH_xD_y , 1997, 105, 211-217.		1
256	Hydrogen content and outgassing of air-baked and vacuum-fired stainless steel. Vacuum, 1997, 48, 771-773.	1.6	28
257	Synthesis of yttrium trihydride films for ex-situ measurements. Journal of Alloys and Compounds, 1996, 239, 158-171.	2.8	113
258	The formation of epitaxial YH_2 in MBE grown yttrium thin films with a thin gold capping layer. Journal of Alloys and Compounds, 1996, 242, 49-57.	2.8	20
259	Optical and electrochemical properties of dc magnetron sputtered Ti-Ce oxide films. Applied Physics Letters, 1996, 68, 3701-3703.	1.5	38
260	Hydrogen content in UHV flanges cut by high-pressure water-jet technique. Vacuum, 1996, 47, 687-688.	1.6	5
261	Magnetic and transport properties of epitaxial $\text{Fe/V}(001)$ superlattice films. Physical Review B, 1996, 54, 1199-1204.	1.1	46
262	Hydrogen-induced lattice expansion in a (001)-oriented Mo/V superlattice. Physical Review B, 1996, 54, 3079-3083.	1.1	26
263	Soft-x-ray emission study of $\text{Fe/V}(001)$ superlattices. Physical Review B, 1996, 54, 10393-10396.	1.1	20
264	MASSPAC: A UHV-system for surface and thin film investigations using nuclear probes. Vacuum, 1995, 46, 1049-1052.	1.6	1
265	Charge transfer at interfaces in $\text{Mo}_x\text{V}_{1-x}$ superlattices. Physical Review B, 1995, 52, 10792-10795.	1.1	13
266	Thermodynamic properties of hydrogen in quasi-two-dimensional vanadium lattices. Journal of Physics Condensed Matter, 1995, 7, 8139-8150.	0.7	33
267	Growth of epitaxial $\text{AlN}(0001)$ on $\text{Si}(111)$ by reactive magnetron sputter deposition. Journal of Applied Physics, 1995, 78, 5721-5726.	1.1	64
268	Low-angle neutron and x-ray scattering of hydrogenated and deuterated Mo/V superlattices. Physical Review B, 1994, 50, 11223-11226.	1.1	15
269	On the near surface yield of the nuclear reaction and initial charge state equilibration. Nuclear Instruments & Methods in Physics Research B, 1994, 94, 345-347.	0.6	2
270	Hydride formation in $\text{Mg-ZrFe}_{1.4}\text{Cr}_{0.6}$ composite material. Journal of Alloys and Compounds, 1994, 209, 117-124.	2.8	46

#	ARTICLE	IF	CITATIONS
271	Hydrogen on Pt _{0.5} Ni _{0.5} (110), alloying effects upon adsorption. Surface Science, 1994, 311, 24-32.	0.8	6
272	Studies of interdiffusion and alloy formation in Fe/V multilayers using hydrogen as a local probe. Journal of Magnetism and Magnetic Materials, 1993, 126, 102-104.	1.0	10
273	Hydrogen uptake of Mo/V superlattices. Journal of Magnetism and Magnetic Materials, 1993, 126, 612-614.	1.0	4
274	Hydride Formation in Mg/Ni-Sandwiches Studied by Hydrogen Profiling and Volumetric Measurements*. Zeitschrift Fur Physikalische Chemie, 1993, 181, 353-358.	1.4	21
275	Hydrogen Uptake in Mo/V Multi Layered Single-Crystal Superlattices – The Role of Charge Transfer at Interfaces*. Zeitschrift Fur Physikalische Chemie, 1993, 181, 343-351.	1.4	17
276	Determination of hydrogen surface coverage of Pt _{0.5} Ni _{0.5} single crystals by NRA. Nuclear Instruments & Methods in Physics Research B, 1992, 64, 83-87.	0.6	7
277	Absorption of hydrogen in superlattices studied by the ¹⁵ N(¹ H, ¹³ C) reaction. Journal of the Less Common Metals, 1991, 172-174, 776-783.	0.9	2
278	Hydrogenated Fe–Ti superlattices studied by hydrogen depth profiling, Mössbauer spectroscopy and X-ray diffraction. Journal of the Less Common Metals, 1991, 172-174, 784-791.	0.9	3
279	Interface effects of hydrogen uptake in Mo/V single-crystal superlattices. Physical Review B, 1991, 43, 6440-6445.	1.1	68
280	Off-resonance and straggling measurements using the ¹ H(¹⁵ N, ¹³ C) reaction. Nuclear Instruments & Methods in Physics Research B, 1990, 45, 36-40.	0.6	12
281	Unusual Kinetics of Hydride Formation in Mg/Pd Sandwiches, Studied by Hydrogen Profiling and Quartz Crystal Microbalance Measurements*. Zeitschrift Fur Physikalische Chemie, 1989, 164, 1259-1260.	1.4	6
282	Hydrogenated tantalum: A convenient calibration substance for hydrogen profile analysis using nuclear resonance reactions. Nuclear Instruments & Methods in Physics Research B, 1989, 42, 257-263.	0.6	25
283	Unusual kinetics of hydride formation in Mg–Pd sandwiches, studied by hydrogen profiling and quartz crystal microbalance measurements. Journal of the Less Common Metals, 1989, 152, 295-309.	0.9	84