Luca Pasquini

List of Publications by Year
in descending order

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118	3,600	196777	169272
papers	citations	29 h-index	56 g-index

120	120	120	4151
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structure and magnetic properties of Fe-Co alloy nanoparticles synthesized by pulsed-laser inert gas condensation. Journal of Alloys and Compounds, 2022, 890, 161863.	2.8	10
2	Structure and hydrogen sorption properties of Mg-Mg2Ni nanoparticles prepared by gas phase condensation. Journal of Alloys and Compounds, 2022, 911, 165014.	2.8	5
3	Charge Separation Efficiency in WO₃/BiVO₄ Photoanodes with CoFe Prussian Blue Catalyst Studied by WavelengthâEDependent IntensityâEModulated Photocurrent Spectroscopy. Solar Rrl, 2022, 6, .	3.1	9
4	Nanostructured Materials for Energy Storage and Conversion. Nanomaterials, 2022, 12, 1583.	1.9	3
5	Indium-modified copper nanocubes for syngas production by aqueous CO₂ electroreduction. Dalton Transactions, 2022, 51, 10787-10798.	1.6	3
6	Magnesium- and intermetallic alloys-based hydrides for energy storage: modelling, synthesis and properties. Progress in Energy, 2022, 4, 032007.	4.6	29
7	Mechanical adaptation of brachiopod shells via hydration-induced structural changes. Nature Communications, 2021, 12, 5383.	5.8	9
8	Materials for hydrogen-based energy storage â€“ past, recent progress and future outlook. Journal of Alloys and Compounds, 2020, 827, 153548.	2.8	518
9	Better Together: Ilmenite/Hematite Junctions for Photoelectrochemical Water Oxidation. ACS Applied Materials & Interfaces, 2020, 12, 47435-47446.	4.0	13
10	Design of Nanomaterials for Hydrogen Storage. Energies, 2020, 13, 3503.	1.6	28
11	CO2 Hydrogenation over Unsupported Fe-Co Nanoalloy Catalysts. Nanomaterials, 2020, 10, 1360.	1.9	17
12	Ultrafast Charge Carrier Dynamics in Vanadium-Modified TiO2 Thin Films and Its Relation to Their Photoelectrocatalytic Efficiency for Water Splitting. Journal of Physical Chemistry C, 2020, 124, 26572-26582.	1.5	4
13	Interfaces within biphasic nanoparticles give a boost to magnesium-based hydrogen storage. Nano Energy, 2020, 72, 104654.	8.2	31
14	Magnesium based materials for hydrogen based energy storage: Past, present and future. International Journal of Hydrogen Energy, 2019, 44, 7809-7859.	3.8	460
15	Reversible MetalâEHydride Transformation in MgâETiâEH Nanoparticles at Remarkably Low Temperatures. ChemPhysChem, 2019, 20, 1325-1333.	1.0	10
16	Photoelectrocatalytic degradation of emerging contaminants at WO3/BiVO4 photoanodes in aqueous solution. Photochemical and Photobiological Sciences, 2019, 18, 2150-2163.	1.6	18
17	One-Step Synthesis of Metal/Oxide Nanocomposites by Gas Phase Condensation. Nanomaterials, 2019, 9, 219.	1.9	13
18	XANES study of vanadium and nitrogen dopants in photocatalytic TiO₂ thin films. Physical Chemistry Chemical Physics, 2018, 20, 221-231.	1.3	17

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19	Interface Enthalpy-Entropy Competition in Nanoscale Metal Hydrides. Inorganics, 2018, 6, 13.	1.2	6
20	The Effects of Nanostructure on the Hydrogen Sorption Properties of Magnesium-Based Metallic Compounds: A Review. Crystals, 2018, 8, 106.	1.0	32
21	Charge carrier dynamics and visible light photocatalysis in vanadium-doped TiO2 nanoparticles. Applied Catalysis B: Environmental, 2018, 237, 603-612.	10.8	46
22	Ocean warming and acidification synergistically increase coral mortality. Scientific Reports, 2017, 7, 40842.	1.6	75
23	Dehydrogenation-hydrogenation characteristics of nanocrystalline Mg2Ni powders compacted by high-pressure torsion. Journal of Alloys and Compounds, 2017, 702, 84-91.	2.8	45
24	Hydrogen Desorption Below 150 Â°C in MgH₂â€“TiH₂ Composite Nanoparticles: Equilibrium and Kinetic Properties. Journal of Physical Chemistry C, 2017, 121, 11166-11177.	1.5	68
25	Element-specific channels for the photoexcitation of V-doped TiO2 nanoparticles. Physical Review B, 2017, 96, .	1.1	4
26	Photoelectrochemical Behavior of Electrophoretically Deposited Hematite Thin Films Modified with Ti(IV). Molecules, 2016, 21, 942.	1.7	6
27	Bioinspired Nanocomposites: Ordered 2D Materials Within a 3D Lattice. Advanced Functional Materials, 2016, 26, 5569-5575.	7.8	23
28	Mgâ€“Ti nanoparticles with superior kinetics for hydrogen storage. International Journal of Hydrogen Energy, 2016, 41, 14447-14454.	3.8	57
29	Characterization of a nanocrystalline Mgâ€“Ni alloy processed by high-pressure torsion during hydrogenation and dehydrogenation. International Journal of Hydrogen Energy, 2016, 41, 9803-9809.	3.8	19
30	Nanostructured materials for solid-state hydrogen storage: A review of the achievement of COST Action MP1103. International Journal of Hydrogen Energy, 2016, 41, 14404-14428.	3.8	94
31	Fast hydrogen sorption from MgH2â€“VO2(B) composite materials. Journal of Power Sources, 2016, 307, 481-488.	4.0	70
32	Gas-phase synthesis of Mgâ€“Ti nanoparticles for solid-state hydrogen storage. Physical Chemistry Chemical Physics, 2016, 18, 141-148.	1.3	33
33	Local Structure of V Dopants in TiO₂ Nanoparticles: X-ray Absorption Spectroscopy, Including Ab-Initio and Full Potential Simulations. Journal of Physical Chemistry C, 2016, 120, 7457-7466.	1.5	22
34	Interface and strain effects on the H-sorption thermodynamics of size-selected Mg nanodots. International Journal of Hydrogen Energy, 2016, 41, 9841-9851.	3.8	12
35	Isotropic microscale mechanical properties of coral skeletons. Journal of the Royal Society Interface, 2015, 12, 20150168.	1.5	14
36	Self-assembly of gas-phase synthesized magnesium nanoparticles on room temperature substrates. Materials Research Express, 2015, 2, 015007.	0.8	15

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37	Molecular dynamics of ionic self-diffusion at an MgO grain boundary. Journal of Materials Science, 2015, 50, 2502-2509.	1.7	21
38	Skeletal mechanical properties of Mediterranean corals along a wide latitudinal gradient. Coral Reefs, 2015, 34, 121-132.	0.9	14
39	Gains and losses of coral skeletal porosity changes with ocean acidification acclimation. Nature Communications, 2015, 6, 7785.	5.8	106
40	IRIDE: Interdisciplinary research infrastructure based on dual electron linacs and lasers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 740, 138-146.	0.7	9
41	Synthesis by reactive ball milling and cycling properties of MgH2â€“TiH2 nanocomposites: Kinetics and isotopic effects. International Journal of Hydrogen Energy, 2014, 39, 9918-9923.	3.8	37
42	Biomineralization control related to population density under ocean acidification. Nature Climate Change, 2014, 4, 593-597.	8.1	68
43	Hydride destabilization in coreâ€“shell nanoparticles. International Journal of Hydrogen Energy, 2014, 39, 2115-2123.	3.8	33
44	Hydrogen storage properties of Mgâ€“Ni nanoparticles. International Journal of Hydrogen Energy, 2013, 38, 12207-12212.	3.8	29
45	Hydrogen desorption properties of MgH2 catalysed with NaNH2. International Journal of Hydrogen Energy, 2013, 38, 12223-12229.	3.8	13
46	Morphological and mechanical characterization of composite calcite/SWCNTâ€“COOH single crystals. Nanoscale, 2013, 5, 6944.	2.8	20
47	A Time-Domain Nuclear Magnetic Resonance Study of Mediterranean Scleractinian Corals Reveals Skeletal-Porosity Sensitivity to Environmental Changes. Environmental Science & Technology, 2013, 47, 12679-12686.	4.6	22
48	Microstructure and morphology changes in MgH2/expanded natural graphite pellets upon hydrogen cycling. International Journal of Hydrogen Energy, 2013, 38, 1918-1924.	3.8	26
49	Depth-dependent magnetization reversal and spin structure of Fe/NiO exchange-coupled epitaxial bilayers. Applied Physics Letters, 2012, 101, 082412.	1.5	7
50	Appearance potential spectroscopy with a photon counting detector and multiple scattering spectral interpretation. Review of Scientific Instruments, 2012, 83, 083901.	0.6	1
51	Magnesium Nanoparticles for Hydrogen Storage: Structure, Kinetics and Thermodynamics. IOP Conference Series: Materials Science and Engineering, 2012, 38, 012001.	0.3	7
52	The puzzling presence of calcite in skeletons of modern solitary corals from the Mediterranean Sea. Geochimica Et Cosmochimica Acta, 2012, 85, 187-199.	1.6	28
53	Organic Semiconducting Single Crystals as Next Generation of Lowâ€Cost, Roomâ€Temperature Electrical Xâ€ray Detectors. Advanced Materials, 2012, 24, 2289-2293.	11.1	84
54	Production and Characterization of Aluminum Iron Powder Composites with Ferromagnetic Properties. Materials Science Forum, 2011, 678, 135-143.	0.3	2

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55	Local structure at interfaces between hydride-forming metals: A case study of Mg-Pd nanoparticles by x-ray spectroscopy. Physical Review B, 2011, 83, .	1.1	15
56	Environmental implications of skeletal micro-density and porosity variation in two scleractinian corals. Zoology, 2011, 114, 255-264.	0.6	49
57	Magnesium nanoparticles with transition metal decoration for hydrogen storage. Journal of Nanoparticle Research, 2011, 13, 5727-5737.	0.8	26
58	Interfacial magnetic structure in Fe/NiO(001). Physical Review B, 2011, 83, .	1.1	9
59	Formation of hollow structures through diffusive phase transition across a membrane. Applied Physics Letters, 2011, 99, 021911.	1.5	12
60	Depth-dependent magnetic characterization of Fe films on NiO(001). Nuclear Instruments & Methods in Physics Research B, 2010, 268, 361-364.	0.6	6
61	Hydrogen storage and phase transformations in Mgâ€“Pd nanoparticles. Journal of Applied Physics, 2010, 108, 073513.	1.1	43
62	Hydrogen Sorption in Magnesium Nanoparticles: Size- and Surface-related Phenomena. Materials Research Society Symposia Proceedings, 2009, 1216, 1.	0.1	0
63	Low temperature anelasticity in Ti6Al4V alloy and Ti6Al4Vâ€“SiCf composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 521-522, 340-342.	2.6	12
64	Anelasticity in nanostructured MgH2â€“Mg: Correlation with hydrogen sorption kinetics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 521-522, 151-154.	2.6	1
65	Hydrogen sorption in Pd-decorated Mgâ€“MgO core-shell nanoparticles. Applied Physics Letters, 2009, 94, 221905.	1.5	40
66	Diffraction anomalous fine structure study of iron/iron oxide nanoparticles. Journal of Applied Crystallography, 2009, 42, 642-648.	1.9	9
67	Metal-hydride transformation kinetics in Mg nanoparticles. Applied Physics Letters, 2009, 94, 041918.	1.5	39
68	X-ray irradiation effects on the trapping properties of Cd1â^'xZnxTe detectors. Journal of Applied Physics, 2009, 106, 093713.	1.1	20
69	Atomic ordering in CuZnAl shape memory alloys investigated via x-ray absorption and diffraction. Applied Physics Letters, 2008, 92, 241903.	1.5	3
70	MgH2 by Gas Phase Condensation: Nanostructure Morphology and Hydrogen Sorption Behaviour. Materials Research Society Symposia Proceedings, 2007, 1042, 1.	0.1	0
71	Reaction with Hydrogen of Micro and Nano Composites Based on Mg. Materials Science Forum, 2007, 555, 335-342.	0.3	3
72	Experimental and Theoretical Characterization of the 3D-Dopants Bias on the H Desorption of Mg Hydrides. Materials Science Forum, 2007, 555, 349-354.	0.3	6

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73	Nano-micro MgH2â€“Mg2NiH4MgH2â€“Mg2NiH4 composites: Tayloring a multichannel system with selected hydrogen sorption properties. International Journal of Hydrogen Energy, 2007, 32, 2926-2934.	3.8	56
74	Automated resonant vibrating-reed analyzer apparatus for a non-destructive characterization of materials for industrial applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 442, 543-546.	2.6	42
75	Microstructure, surface properties and hydrating behaviour of Mgâ€“C composites prepared by ball milling with benzene. International Journal of Hydrogen Energy, 2006, 31, 2088-2096.	3.8	33
76	X-ray magnetic circular dichroism study of iron/iron oxide granular nanostructures. Nuclear Instruments & Methods in Physics Research B, 2006, 246, 20-24.	0.6	5
77	Anelasticity and Structural Stability of ECAP Processed Al-Mg-Si Alloys Investigated by Mechanical Spectroscopy. Materials Science Forum, 2006, 503-504, 835-840.	0.3	4
78	Hydrogen Desorption from MgH2 Based Nano-Micro Composites. Materials Research Society Symposia Proceedings, 2006, 971, 1.	0.1	0
79	Desorption Behaviour in Nanostructured MgH₂-Co. Materials Science Forum, 2006, 518, 79-84.	0.3	17
80	Local magnetism in granular iron/iron oxide nanostructures by phase- and site-selective x-ray magnetic circular dichroism. Physical Review B, 2006, 74, .	1.1	18
81	Hydrogen desorption from ball milled MgH2 catalyzed with Fe. European Physical Journal B, 2005, 43, 19-27.	0.6	101
82	Role of Organic Additives in Hydriding Properties of Mg-C Nanocomposites. Materials Science Forum, 2005, 494, 137-142.	0.3	10
83	Multiple Scattering Analysis of O KEdge NEXAFS in Iron Oxides. Physica Scripta, 2005, , 424.	1.2	12
84	Microstructure and Hydrogen Desorption in Nanostructured MgH₂-Fe. Materials Science Forum, 2004, 453-454, 205-212.	0.3	8
85	Magnetization reversal process in a nanoscale Fe/FeOxide granular system. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1185-E1187.	1.0	0
86	Preparation and characterization of cobalt-based nanostructured materials. European Physical Journal B, 2003, 31, 545-551.	0.6	11
87	Synthesis and characterization of gold-based quantum dots. Journal of Materials Science Letters, 2003, 22, 1697-1699.	0.5	5
88	Size-dependent oxidation in iron/iron oxide core-shell nanoparticles. Physical Review B, 2003, 68, .	1.1	175
89	Magnetotransport in core-shell Feâ€“Fe oxide nanostructures. Journal of Magnetism and Magnetic Materials, 2003, 262, 56-59.	1.0	17
90	Electron holography of gas-phase condensed Fe nanoparticles. Journal of Magnetism and Magnetic Materials, 2003, 262, 142-145.	1.0	21

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91	Hydriding Behaviour of Mg-C Nanocomposites. Materials Research Society Symposia Proceedings, 2003, 801, 70.	0.1	2
92	Scale Dependent Anelasticity and Mechanical Behavior: The Case of Nanocrystalline Metals. , 2003, , 217-237.		0
93	Size and oxidation effects on the vibrational properties of nanocrystallineÎ±â˜Fe. Physical Review B, 2002, 66, .	1.1	56
94	Observation of magnetoresistance in coreâ€“shell Feâ€“Fe oxide systems. Journal of Applied Physics, 2002, 91, 8593.	1.1	18
95	Time dependence of magnetization and strain in Terfenol. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1453-1456.	1.0	0
96	Electron Holography Investigation of Nanocrystalline Iron Particles. Physica Status Solidi A, 2002, 189, 459-467.	1.7	1
97	Thermal evolution of the magnetization in nanocrystalline Fe particles investigated by electron holography. Journal of Applied Physics, 2001, 90, 4152-4158.	1.1	5
98	Automated resonant mechanical analyzer. Review of Scientific Instruments, 2001, 72, 2148-2152.	0.6	12
99	Mechanical spectroscopy of nanostructured metallic systems. , 2001, , 29-58.		0
100	Nanocrystalline Fe Powders Analysed by Electron Holography. Materials Science Forum, 2001, 373-376, 461-464.	0.3	0
101	Thermal vacancy formation andD03ordering in nanocrystalline intermetallic(Fe3Si)95Nb5. Physical Review B, 2001, 63, .	1.1	15
102	Mechanical Spectroscopy of Nanocrystalline Metals. Materials Research Society Symposia Proceedings, 2000, 634, 151.	0.1	0
103	Self-diffusion and magnetic properties in explosion densified nanocrystalline Fe. Scripta Materialia, 2000, 42, 961-966.	2.6	27
104	Vibrational density of states of nanocrystalline iron and nickel. Journal of Applied Physics, 2000, 88, 4571.	1.1	69
105	Upward modulus trend in NiAl and NiFeAl single crystals. Journal of Alloys and Compounds, 2000, 310, 351-355.	2.8	1
106	Mechanical spectroscopy of nanocrystalline metals: Structure and anelastic behavior. Journal of Electronic Materials, 1999, 28, 1055-1061.	1.0	6
107	Mechanical behaviour of nanocrystalline iron and nickel in the quasi-static and low frequency anelastic regime. Scripta Materialia, 1999, 11, 709-720.	0.5	26
108	Thermal evolution of ball milled nanocrystalline iron. Scripta Materialia, 1999, 12, 685-688.	0.5	18

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109	Magnetoelasticity and internal strains in nanocrystalline nickel. Scripta Materialia, 1999, 12, 817-820.	0.5	6
110	Mechanical behaviour of NiAl and Ni3Al ordered compounds entering the nano-grain size regime. Scripta Materialia, 1999, 12, 895-898.	0.5	7
111	A combined study of nanocrystalline aluminium by X-ray diffraction and mechanical spectroscopy. Scripta Materialia, 1998, 10, 437-448.	0.5	12
112	Anelastic and structural behavior of ball milled nanostructured iron. Scripta Materialia, 1998, 10, 741-753.	0.5	22
113	Structural evolution of a Cu1â^'xCox alloy during thermal heating studied by acoustic spectroscopy. Journal of Non-Crystalline Solids, 1998, 232-234, 239-244.	1.5	2
114	Anelastic Behaviour of Nanocrystalline Aluminium Prepared by Mechanical Attrition. Materials Science Forum, 1998, 269-272, 999-1004.	0.3	2
115	Structural and Elastic Properties of Nanocrystalline Iron and Nickel Prepared by Ball Milling in Controlled Thermodynamic Environment. Materials Science Forum, 1998, 269-272, 1005-1012.	0.3	11
116	Microstructure-related anelastic and magnetoelastic behavior of nanocrystalline nickel. Journal of Applied Physics, 1998, 84, 4219-4226.	1.1	29
117	The influence of grain size on the mechanical properties of nanocrystalline aluminium. Scripta Materialia, 1997, 9, 611-614.	0.5	60
118	Anelastic Relaxations in Aluminium with Ultrafine Grain Structure. European Physical Journal Special Topics, 1996, 06, C8-345-C8-348.	0.2	0