Paulo F P Fichtner

List of Publications by Year
in descending order

135	3,728	236912	138468
papers	citations	25 h-index	58 g-index

138	138	138	3083
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ion implantation effects on the microstructure, electrical resistivity and thermal conductivity of amorphous CrSi2 thin films. Journal of Materials Science, 2022, 57, 1174-1185.	3.7	2
2	Electron irradiation effects on Ag nanoparticles. Journal of Materials Science, 2021, 56, 8202-8208.	3.7	1
3	Electron irradiation effects in Au thin films. Journal of Materials Science: Materials in Electronics, 2021, 32, 13291-13304.	2.2	0
4	The effect of flux on ion irradiation-enhanced precipitation in AISI-316L: An in-situ TEM study. Journal of Nuclear Materials, 2020, 541, 152414.	2.7	5
5	Au and Ag ion irradiation effects on the carbide precipitation and Ar bubble formation in solubilized AISI 316L alloys. Nuclear Instruments & Methods in Physics Research B, 2019, 458, 174-178.	1.4	7
6	Bi nanowires modified by 400 keV and 1 MeV Au ions. AIP Advances, 2018, 8, 125103.	1.3	2
7	Influence of Ar Implantation on the Precipitation in Au Ion Irradiated AISI 316L Solution Annealed Alloy. MRS Advances, 2018, 3, 1799-1805.	0.9	7
8	Relaxation of Si1-xGex buffer layers on Si(100) through helium ion implantation. , 2018, , 181-184.		0
9	Ion irradiation-induced polycrystalline InSb foam. Journal Physics D: Applied Physics, 2017, 50, 485104.	2.8	10
10	Electron irradiation effects on the nucleation and growth of Au nanoparticles in silicon nitride membranes. Journal of Applied Physics, 2017, 122, .	2.5	3
11	In-situ transmission electron microscopy growth of nanoparticles under extreme conditions. Journal of Applied Physics, 2016, 119, 035901.	2.5	6
12	Stabilization of perpendicular magnetic anisotropy in CeO₂ films deposited on Co/Pt multilayers. RSC Advances, 2016, 6, 56785-56789.	3.6	5
13	Titanium Nitride as a Strain Gauge Material. Journal of Microelectromechanical Systems, 2016, 25, 683-690.	2.5	5
14	On the use of MEIS cartography for the determination of Si 1â€“x Ge x thin-film strain. Thin Solid Films, 2016, 611, 101-106.	1.8	5
15	Tuning the optoelectronic properties of amorphous MoOx films by reactive sputtering. Applied Physics Letters, 2015, 106, .	3.3	35
16	Correlation between tetragonal zinc-blende structure and magnetocrystalline anisotropy of MnGa epilayers on GaAs(111). Journal of Magnetism and Magnetic Materials, 2015, 381, 83-88.	2.3	9
17	Morphological and compositional characteristics of bimetallic core@shell nanoparticles revealed by MEIS. Applied Surface Science, 2015, 330, 164-171.	6.1	9
18	MEIS, TEM and GISAXS investigation of buried Pb nanoislands in SiO 2 /Si interface. Applied Surface Science, 2014, 321, 80-85.	6.1	2

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19	TiO₂ nanotubes sensitized with CdSe via RF magnetron sputtering for photoelectrochemical applications under visible light irradiation. Physical Chemistry Chemical Physics, 2014, 16, 9148-9153.	2.8	25
20	Lithium implantation at low temperature in silicon for sharp buried amorphous layer formation and defect engineering. Journal of Applied Physics, 2013, 113, 083515.	2.5	3
21	Nanoscale organization by elastic interactions between H and He platelets in Si. Journal of Applied Physics, 2013, 114, 073517.	2.5	5
22	New approach for structural characterization of planar sets of nanoparticles embedded into a solid matrix. Scientific Reports, 2013, 3, 3414.	3.3	5
23	Tailoring the blueâ€“violet photoluminescence from Sn-implanted SiO2using a two-step annealing process. Journal Physics D: Applied Physics, 2012, 45, 095304.	2.8	1
24	Formation of dense and aligned planar arrangements of Pb nanoparticles at silica/silicon interfaces. Materials Research Society Symposia Proceedings, 2011, 1308, 60201.	0.1	0
25	The mechanisms of surface exfoliation in H and He implanted Si crystals. Scripta Materialia, 2011, 65, 1045-1048.	5.2	15
26	Structural characterization of Pb nanoislands in SiO2/Si interface synthesized by ion implantation through MEIS analysis. Surface Science, 2011, 605, 654-658.	1.9	11
27	Aging effects on the nucleation of Pb nanoparticles in silica. Journal of Applied Physics, 2011, 109, 014320.	2.5	14
28	Dielectric breakdown in AlOxtunnelling barriers. Journal Physics D: Applied Physics, 2011, 44, 135403.	2.8	2
29	Role of Thermodynamics in the Shape Transformation of Embedded Metal Nanoparticles Induced by Swift Heavy-Ion Irradiation. Physical Review Letters, 2011, 106, 095505.	7.8	100
30	Valence Evaluation of Cerium in Nanocrystalline CeO₂Films Electrodeposited on Si Substrates. Journal of the Electrochemical Society, 2011, 159, K27-K33.	2.9	31
31	Anisotropy of Magnetization and Nanocrystalline Texture in Electrodeposited CeO[sub 2] Films. Electrochemical and Solid-State Letters, 2011, 14, P9.	2.2	18
32	First-order-reversal-curve analysis of Prâ€“Feâ€“B-based exchange spring magnets. Journal of Materials Science, 2010, 45, 5077-5083.	3.7	19
33	First-order-reversal-curve analysis of Prâ€“Feâ€“B-based nanocomposites. Journal of Magnetism and Magnetic Materials, 2010, 322, 827-831.	2.3	5
34	On the microstructure of Si coimplanted with H+ and He+ ions at moderate energies. Journal of Applied Physics, 2010, 108, .	2.5	23
35	Shape transformation of Sn nanocrystals induced by swift heavy-ion irradiation and the necessity of a molten ion track. Physical Review B, 2010, 82, .	3.2	24
36	Ferromagnetism induced by oxygen and cerium vacancies above the percolation limit in CeO₂. Journal of Physics Condensed Matter, 2010, 22, 216004.	1.8	59

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37	H-induced subcritical crack propagation and interaction phenomena in (001) Si using He-cracks templates. Applied Physics Letters, 2010, 96, 031907.	3.3	20
38	Role of dipolar interactions in a system of Ni nanoparticles studied by magnetic susceptibility measurements. Physical Review B, 2009, 80, .	3.2	51
39	Localized exfoliation versus delamination in H and He coimplanted (001) Si. Journal of Applied Physics, 2009, 105, .	2.5	27
40	Interaction of interstitials with buried amorphous layer in silicon. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 1969-1973.	0.8	5
41	Abnormal Grain Growth Behavior in Nanostructured Al Thin Films on SiO2/Si Substrates. Materials Research Society Symposia Proceedings, 2008, 1150, 1.	0.1	0
42	Nanoporous SiO2/Si thin layers produced by ion track etching: Dependence on the ion energy and criterion for etchability. Journal of Applied Physics, 2008, 104, .	2.5	58
43	Orientation of H platelets under local stress in Si. Applied Physics Letters, 2008, 93, 022106.	3.3	18
44	Low temperature aging effects on the formation of Sn nanoclusters in SiO2â^•Si films and interfaces. Applied Physics Letters, 2007, 91, .	3.3	11
45	Carrier dynamics in stacked InPâ^•GaAs quantum dots. Applied Physics Letters, 2007, 91, 121917.	3.3	5
46	Structural and optical properties of InP quantum dots grown on GaAs(001). Journal of Applied Physics, 2007, 101, 073508.	2.5	15
47	The interaction of cavities in silicon with moving amorphousâ€“crystalline interfaces. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 177-180.	1.4	2
48	Nanocavities induced by neon Plasma Based Ion Implantation in silicon. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 750-752.	1.4	5
49	Ion irradiation induced precipitation of Î³ phase in Cuâ€“Znâ€“Alâ€“Ni. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 444, 178-183.	5.6	11
50	Correlation between structural evolution and photoluminescence of Sn nanoclusters in SiO2 layers. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 157-160.	1.4	7
51	Strain relaxation of pseudomorphic Si1â^'xGex/Si(100) heterostructures by Si+ ion implantation. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 568-571.	1.4	0
52	Characterization of neon cavity in silicon. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 494-497.	1.4	2
53	Formation of neon induced cavities in silicon by plasma based ion implantation. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 193-195.	1.4	2
54	Damage accumulation in neon implanted silicon. Journal of Applied Physics, 2006, 100, 043505.	2.5	27

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55	Ion irradiation induced formation of close packed particles in Î² Cuâ€“Znâ€“Al. Scripta Materialia, 2005, 53, 109-114.	5.2	5
56	Effect of annealing atmosphere on the structure and luminescence of Sn-implanted SiO2 layers. Applied Physics Letters, 2005, 86, 023101.	3.3	26
57	Formation of epitaxial Î²-Sn islands at the interface of SiO2â^•Si layers implanted with Sn ions. Applied Physics Letters, 2005, 86, 191914.	3.3	8
58	Nanocrystalline FexNi1â^'x (xâ‰0.65) alloys formed by chemical synthesis. Journal of Alloys and Compounds, 2005, 396, 10-17.	5.5	13
59	Strain relaxation of SiGe/Si heterostructures by helium ion implantation and subsequent annealing: Helium precipitates acting as dislocation sources. Springer Proceedings in Physics, 2005, , 97-102.	0.2	0
60	Ruthenium dioxide nanoparticles in ionic liquids: synthesis, characterization and catalytic properties in hydrogenation of olefins and arenes. Journal of the Brazilian Chemical Society, 2004, 15, 901-910.	0.6	63
61	Strain relaxation of pseudomorphic Si1â^'xGexâ^•Si(100) heterostructures after Si+ ion implantation. Journal of Applied Physics, 2004, 96, 1745-1747.	2.5	13
62	Amorphization/recrystallization of buried amorphous silicon layer induced by oxygen ion implantation. Journal of Applied Physics, 2004, 95, 877-880.	2.5	12
63	Pre-irradiation memory effect on the photoluminescence intensity of Ge-implanted SiO2 layers. Nuclear Instruments & Methods in Physics Research B, 2004, 218, 438-443.	1.4	5
64	Microstructure evolution effects of helium redistribution in as-implanted silicon and Si0.8Ge0.2/Si heterostructues. Nuclear Instruments & Methods in Physics Research B, 2004, 219-220, 703-707.	1.4	3
65	Formation of bubbles and extended defects in He implanted (100) Si at elevated temperatures. Nuclear Instruments & Methods in Physics Research B, 2004, 219-220, 713-717.	1.4	10
66	On the Use of Ruthenium Dioxide in 1-n-Butyl-3-Methylimidazolium Ionic Liquids as Catalyst Precursor for Hydrogenation Reactions. Catalysis Letters, 2004, 92, 149-155.	2.6	71
67	The Partial Hydrogenation of Benzene to Cyclohexene by Nanoscale Ruthenium Catalysts in Imidazolium Ionic Liquids. Chemistry - A European Journal, 2004, 10, 3734-3740.	3.3	233
68	Characterization of neon implantation damage in silicon. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 112, 111-115.	3.5	11
69	Investigation of the effects of He bubbles on the nucleation, growth and thermal stability of Alâ€“Cu nanoprecipitates in ion implanted Al foils. Acta Materialia, 2004, 52, 693-703.	7.9	8
70	Processing of nano-holes and pores on SiO2 thin films by MeV heavy ions. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 486-489.	1.4	24
71	Creation of noble metal nanoclusters in bismuth tellurite. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 653-656.	1.4	0
72	The Use of Imidazolium Ionic Liquids for the Formation and Stabilization of Ir0 and Rh0 Nanoparticles: Efficient Catalysts for the Hydrogenation of Arenes. Chemistry - A European Journal, 2003, 9, 3263-3269.	3.3	397

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73	Tetrataenite and other Feâ€“Ni equilibrium phases produced by reduction of nanocrystalline NiFe2O4. Solid State Communications, 2003, 128, 345-350.	1.9	24
74	Nanostructured Fe50Ni50 alloy formed by chemical reduction. Solid State Communications, 2003, 125, 265-270.	1.9	25
75	High frequency n-type MODFETs on ultra-thin virtual SiGe substrates. Solid-State Electronics, 2003, 47, 1179-1182.	1.4	11
76	Nanoscale Pt(0) Particles Prepared in Imidazolium Room Temperature Ionic Liquids:â€‰ Synthesis from an Organometallic Precursor, Characterization, and Catalytic Properties in Hydrogenation Reactions. Inorganic Chemistry, 2003, 42, 4738-4742.	4.0	337
77	Cluster coarsening and luminescence emission intensity of Ge nanoclusters in SiO2 layers. Journal of Applied Physics, 2003, 94, 6059-6064.	2.5	46
78	Effect of helium ion implantation and annealing on the relaxation behavior of pseudomorphic Si1â^'xGex buffer layers on Si (100) substrates. Journal of Applied Physics, 2002, 92, 4290-4295.	2.5	68
79	Gettering of copper in silicon at half of the projected ion range induced by helium implantation. Journal of Applied Physics, 2002, 91, 69.	2.5	15
80	Photoluminescence of Ge Nanoclusters in Ion Implanted SiO2. Materials Research Society Symposia Proceedings, 2002, 744, 1.	0.1	0
81	Transition-Metal Nanoparticles in Imidazolium Ionic Liquids:Â Recycable Catalysts for Biphasic Hydrogenation Reactions. Journal of the American Chemical Society, 2002, 124, 4228-4229.	13.7	773
82	Implantation temperature dependence of He bubble formation in Si. Nuclear Instruments & Methods in Physics Research B, 2002, 190, 756-760.	1.4	12
83	Formation of coherent gold nanoclusters in lithium niobate. Nuclear Instruments & Methods in Physics Research B, 2002, 191, 478-481.	1.4	2
84	Helium implantation induced metal gettering in silicon at half of the projected ion range. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 176-181.	1.4	4
85	The effects of implantation temperature on He bubble formation in silicon. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 335-339.	1.4	12
86	Defect evolution and characterization in He-implanted LiNbO3. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 394-397.	1.4	19
87	Nucleation and growth behavior of Cuâ€“Al precipitates in He implanted and annealed aluminum. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 432-436.	1.4	0
88	Strain relaxation of pseudomorphic heterostructures after hydrogen or helium ion implantation for virtual substrate fabrication. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 357-367.	1.4	67
89	Formation of nanoclusters in Au-implanted bismuth tellurite. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 331-334.	1.4	3
90	INFLUENCE OF HELIUM CO-IMPLANTATION ON THE FORMATION OF GOLD NANOCLUSTERS IN LITHIUM NIOBATE. Modern Physics Letters B, 2001, 15, 1348-1354.	1.9	2

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91	The effects of He implantation on the thermal stability of Cuâ€“Al precipitates in aluminum. Nuclear Instruments & Methods in Physics Research B, 2000, 161-163, 1075-1079.	1.4	3
92	He-induced cavity formation in silicon upon high-temperature implantation. Nuclear Instruments & Methods in Physics Research B, 2000, 161-163, 1038-1042.	1.4	19
93	Evidence for interstitial-type defects in the Rp/2 region of MeV-self-ion-implanted silicon produced by standard ion milling procedure. Nuclear Instruments & Methods in Physics Research B, 2000, 161-163, 1090-1094.	1.4	5
94	Strain development and damage accumulation during neon ion implantation into silicon at elevated temperatures. Journal of Applied Physics, 2000, 88, 1771-1775.	2.5	12
95	Copper gettering at half the projected ion range induced by low-energy channeling He implantation into silicon. Applied Physics Letters, 2000, 77, 972.	3.3	12
96	Helium bubbles in silicon: Study of the residual helium content using elastic recoil detection analysis. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 583-586.	1.4	11
97	Nucleation and growth of platelet bubble structures in He implanted silicon. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 460-464.	1.4	32
98	Improving the Thermal Stability of Photoresist Films by Ion Beam Irradiation. Materials Research Society Symposia Proceedings, 1997, 504, 443.	0.1	1
99	Helium Induced Cavities in Silicon: Their Formation, Microstructure and Gettering Ability. Materials Research Society Symposia Proceedings, 1997, 469, 451.	0.1	12
100	Overpressurized bubbles versus voids formed in helium implanted and annealed silicon. Applied Physics Letters, 1997, 70, 732-734.	3.3	67
101	Impurity gettering effects in separation-by-implanted-oxygen (SIMOX) wafers: what getters what, where and how. Microelectronic Engineering, 1997, 36, 129-132.	2.4	7
102	Range parameters study of medium-heavy ions implanted into GaAs. Nuclear Instruments & Methods in Physics Research B, 1996, 111, 12-16.	1.4	2
103	Kr and N implantations in a stainless steel AISI304L: thermal evolution. Surface and Coatings Technology, 1995, 70, 211-213.	4.8	1
104	Ranges in Si and lighter mono and multi-element targets. Materials Science and Engineering Reports, 1995, 15, 1-83.	31.8	47
105	Patterning method for silicides based on local oxidation. Applied Physics Letters, 1995, 67, 3459-3461.	3.3	26
106	Enhanced damage accumulation in carbon implanted silicon. Applied Physics Letters, 1994, 64, 3596-3597.	3.3	12
107	Range parameters of Er, Ga and F implanted into SiC films. Nuclear Instruments & Methods in Physics Research B, 1994, 85, 579-583.	1.4	5
108	Thermal behavior of bubbles and nitrides in a Cr-rich steel. Hyperfine Interactions, 1994, 83, 253-258.	0.5	0

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109	Heating Rate Effects in Rapid Thermal Annealing of Arsenic Implanted Silicon. Materials Research Society Symposia Proceedings, 1994, 342, 351.	0.1	0
110	Electrical activation of bismuth implanted into silicon by rapid thermal annealing and kinetics of defects. Journal of Applied Physics, 1993, 74, 119-122.	2.5	20
111	Recrystallization behavior of silicon implanted with iron. Journal of Applied Physics, 1992, 71, 5423-5426.	2.5	13
112	Range parameters study of Pb and Au implanted into SiC films. Nuclear Instruments & Methods in Physics Research B, 1992, 64, 668-671.	1.4	17
113	A simulation study of ostwald ripening of gas bubbles in metals accounting for real gas behaviour. Acta Metallurgica Et Materialia, 1991, 39, 1845-1852.	1.8	8
114	Precipitate coarsening and Co redistribution after ion implantation in silicon. Nuclear Instruments & Methods in Physics Research B, 1991, 59-60, 632-636.	1.4	14
115	Inert Gas Bubble Coarsening Mechanisms. NATO ASI Series Series B: Physics, 1991, , 289-297.	0.2	11
116	Unique ion beam scattering technique on depth profile determination. Radiation Effects and Defects in Solids, 1990, 114, 337-341.	1.2	1
117	Range profiles of medium and heavy ions implanted into SiO2. Nuclear Instruments & Methods in Physics Research B, 1988, 35, 17-20.	1.4	32
118	Non-regular depth profiles of light ions implanted into organic polymer films. Nuclear Instruments & Methods in Physics Research B, 1988, 32, 150-154.	1.4	40
119	Range parameters of heavy ions implanted into C films. Nuclear Instruments & Methods in Physics Research B, 1988, 33, 122-124.	1.4	24
120	Thermal behavior and range distribution of209Bi implanted into the Al/V bilayer structure. Journal of Applied Physics, 1988, 63, 4431-4434.	2.5	0
121	Implanted boron depth profiles in the AZ111 photoresist. Journal of Applied Physics, 1988, 63, 2083-2085.	2.5	26
122	Universal relations between range and damage profile parameters. Radiation Effects, 1987, 103, 89-101.	0.4	14
123	Range profiles of 10 to 390 keV ions (29 â‰¦ Z1 â‰¦ 83) implanted into amorphous silicon. Nuclear Instruments & Methods in Physics Research B, 1987, 28, 481-487.	1.4	37
124	Projected ranges and range stragglings of Au and Bi implanted into carbon films and into SiO2. Nuclear Instruments & Methods in Physics Research B, 1987, 19-20, 25-27.	1.4	25
125	Analytical approximations for range and damage profile parameter predictions on a microcomputer. Nuclear Instruments & Methods in Physics Research B, 1987, 19-20, 28-31.	1.4	9
126	Range distributions and thermal behaviour of Bi implanted into kcl and Al/KCl bilayer structures. Nuclear Instruments & Methods in Physics Research B, 1986, 14, 173-178.	1.4	6

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127	Energy dependence of the Z1-range oscillation effect in silicon. Nuclear Instruments & Methods in Physics Research B, 1986, 15, 58-60.	1.4	13
128	Range profiles of ions in double-layer structures. Nuclear Instruments & Methods in Physics Research B, 1986, 15, 71-74.	1.4	7
129	Implantation and thermal annealing behaviour of Bi implanted into Al/Ti and Al/V bilayer structures. Nuclear Instruments & Methods in Physics Research B, 1986, 15, 78-80.	1.4	2
130	Implantation and thermal annealing behaviour of Bi imlanted into the Al/KCl bilayer compound. Radiation Effects, 1986, 98, 27-33.	0.4	1
131	Range profiles of implanted Bi and Au in amorphous silicon. Nuclear Instruments & Methods in Physics Research B, 1985, 6, 453-458.	1.4	51
132	Depth profile and thermal annealing behavior of Bi implanted into an Al/Ti bilayer structure. Journal of Applied Physics, 1985, 58, 659-662.	2.5	3
133	Range Profiles of 10 to 380 keV120Sn and133Cs in amorphous silicon. Radiation Effects, 1985, 90, 103-110.	0.4	9
134	Range and range straggling of 15 to 350 keV 69Ga in amorphous silicon. Radiation Effects, 1984, 85, 117-122.	0.4	8
135	Segmentation of TEM images using oscillatory neural networks. , 0, , .		2