

Stefano Chiussi

List of Publications by Year in descending order

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114
papers

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114
all docs

114
docs citations

114
times ranked

3386
citing authors

#	ARTICLE	IF	CITATIONS
1	Flexible sensing devices integrating molecularly-imprinted polymers for the detection of 3-nitrotyrosine biomarker. Biosensors and Bioelectronics: X, 2022, 10, 100107.	1.7	2
2	Raman shifts in MBE-grown Si _x Ge _{1-x} Sn _y alloys with large Si content. Journal of Raman Spectroscopy, 2021, 52, 1167-1175.	2.5	2
3	Fabrication of GePb-Alloys by Means of Pulsed Laser Induced Epitaxy. , 2019, , .		0
4	Ellipsometric analysis of concentration gradients induced in semiconductor crystals by pulsed laser induced epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 061213.	1.2	0
5	Device-Compatible Chiroptical Surfaces through Self-Assembly of Enantiopure Allenes. Langmuir, 2018, 34, 4548-4553.	3.5	18
6	Structural characterization of bioceramics and mineralized tissues based on Raman and XRD techniques. Ceramics International, 2018, 44, 495-504.	4.8	34
7	Growth of patterned GeSn and GePb alloys by pulsed laser induced epitaxy. , 2017, , .		4
8	Ex vivo analysis of the oral epithelium by high-wavenumber Raman spectroscopy. International Journal of Biomedical Engineering and Technology, 2017, 24, 154.	0.2	0
9	Photoluminescence from ultrathin Ge-rich multiple quantum wells observed up to room temperature: Experiments and modeling. Physical Review B, 2016, 94, .	3.2	8
10	(Si)GeSn nanostructures for optoelectronic device applications. , 2016, , .		1
11	193 nm Excimer laser processing of Si/Ge/Si(100) micropatterns. Applied Surface Science, 2016, 362, 217-220.	6.1	3
12	Fabrication of GeSn-multiple quantum wells by overgrowth of Sn on Ge by using molecular beam epitaxy. Applied Physics Letters, 2015, 107, .	3.3	12
13	Multi-stacks of epitaxial GeSn self-assembled dots in Si: Structural analysis. Journal of Applied Physics, 2015, 117, 125706.	2.5	8
14	Lasing in direct-bandgap GeSn alloy grown on Si. Nature Photonics, 2015, 9, 88-92.	31.4	1,016
15	Growth and characterization of SiGeSn quantum well photodiodes. Optics Express, 2015, 23, 25048.	3.4	40
16	Dopant profile engineering using ArF excimer laser, flash lamp and spike annealing for junction formation. , 2014, , .		2
17	Hanle-effect measurements of spin injection from Mn ₅ Ge ₃ C _{0.8} /Al ₂ O ₃ -contacts into degenerately doped Ge channels on Si. Applied Physics Letters, 2014, 105, 222408.	3.3	22
18	Si-Ge-Sn heterostructures: Growth and applications. , 2014, , .		0

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19	(Invited) UV Excimer Laser Assisted Heteroepitaxy of (Si)GeSn on Si(100). ECS Transactions, 2014, 64, 115-125.	0.5	0
20	Structure and composition of Silicon-Germanium-Tin microstructures obtained through Mask Projection assisted Pulsed Laser Induced Epitaxy. Microelectronic Engineering, 2014, 125, 18-21.	2.4	1
21	Pilot research on the evaluation and detection of head and neck squamous cell carcinoma by Raman spectroscopy. Journal of Raman Spectroscopy, 2014, 45, 550-557.	2.5	17
22	Spin accumulation in n-Ge on Si with sputtered Mn ₅ Ge ₃ C _{0.8} -contacts. , 2014, , .		0
23	Biomaterialization of marine-patterned C-scaffolds. Bioinspired, Biomimetic and Nanobiomaterials, 2014, 3, 106-114.	0.9	2
24	Tensely strained GeSn alloys as optical gain media. Applied Physics Letters, 2013, 103, .	3.3	63
25	Study on excimer laser irradiation for controlled dehydrogenation and crystallization of boron doped hydrogenated amorphous/nanocrystalline silicon multilayers. Thin Solid Films, 2013, 536, 147-151.	1.8	10
26	<i>In vitro</i> response of pre-osteoblastic cells to laser microgrooved PEEK. Biomedical Materials (Bristol), 2013, 8, 055006.	3.3	21
27	Study of dopant activation in biaxially compressively strained SiGe layers using excimer laser annealing. Journal of Applied Physics, 2013, 113, .	2.5	21
28	FEM numerical analysis of excimer laser induced modification in alternating multi-layers of amorphous and nano-crystalline silicon films. Applied Surface Science, 2012, 258, 9342-9346.	6.1	1
29	Silicon germanium tin alloys formed by pulsed laser induced epitaxy. Applied Physics Letters, 2012, 100, .	3.3	12
30	Laser synthesis of germanium tin alloys on virtual germanium. Applied Physics Letters, 2012, 100, 104101.	3.3	26
31	Laser assisted formation of binary and ternary Ge/Si/Sn alloys. Thin Solid Films, 2012, 520, 3262-3265.	1.8	10
32	Innovative Bioinspired SIC Ceramics from Vegetable Resources. , 2012, , 51-67.		1
33	FEM for modelling 193 nm excimer laser treatment of SiO ₂ /Si/Si(1-x)Ge _x heterostructures on SOI substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 936-939.	0.8	1
34	Improvement of electrospun polymer fiber meshes pore size by femtosecond laser irradiation. Applied Surface Science, 2011, 257, 4091-4095.	6.1	27
35	Comparative evaluation of UV-vis-IR Nd:YAG laser cleaning of beeswax layers on granite substrates. Applied Surface Science, 2011, 257, 5484-5490.	6.1	9
36	Biological response of laser macrostructured and oxidized titanium alloy: An in vitro and in vivo study. Journal of Applied Biomaterials and Biomechanics, 2011, 9, 214-222.	0.4	3

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37	(Invited) Pulsed UV-Laser Processing of Amorphous and Crystalline Group IV Semiconductors. ECS Transactions, 2011, 41, 315-330.	0.5	0
38	Experimental and theoretical study of the Nd:YAG laser removal of beeswax on Galician granite at 355 nm. Applied Physics A: Materials Science and Processing, 2010, 100, 741-746.	2.3	2
39	Optimisation of Raman analysis of walnut oil used as protective coating of Galician granite monuments. Journal of Raman Spectroscopy, 2010, 41, 1449-1454.	2.5	12
40	Numerical analysis of temperature profile and thermal-stress during excimer laser induced heteroepitaxial growth of patterned amorphous silicon and germanium bi-layers deposited on Si(100). Thin Solid Films, 2010, 518, 2431-2436.	1.8	6
41	Numerical studies of temperature profile and hydrodynamic phenomena during excimer laser assisted heteroepitaxial growth of patterned silicon and germanium bi-layers. Thin Solid Films, 2010, 518, S143-S146.	1.8	4
42	Surface modification of a biodegradable composite by UV laser ablation: <i>in vitro</i> biological performance. Journal of Tissue Engineering and Regenerative Medicine, 2010, 4, n/a-n/a.	2.7	4
43	Amorphous silicon thin film solar cells deposited on flexible substrates using different zinc oxide layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1061-1064.	0.8	6
44	Finite element simulation for ultraviolet excimer laser processing of patterned Si/SiGe/Si(100) heterostructures. Applied Physics Letters, 2010, 97, .	3.3	10
45	Experimental and theoretical study of the ND:YAG laser removal of beeswax on Galician granite at 355 nm. Applied Physics A: Materials Science and Processing, 2010, 100, 741.	2.3	1
46	A new generation of bio-derived ceramic materials for medical applications. Journal of Biomedical Materials Research - Part A, 2009, 88A, 807-813.	4.0	32
47	Excimer laser removal of beeswax from galician granite monuments. Journal of Cultural Heritage, 2009, 10, 48-52.	3.3	22
48	Excimer laser chemical ammonia patterning on PET film. Journal of Materials Science: Materials in Medicine, 2009, 20, 597-606.	3.6	17
49	Characterization of Thin Calcium Phosphate Coating. , 2009, , 25-66.		5
50	Experimental determination of La ₂ O ₃ thermal conductivity and its application to the thermal analysis of a-Ge/La ₂ O ₃ /c-Si laser annealing. Thin Solid Films, 2008, 516, 7400-7405.	1.8	21
51	Numerical simulation of the UV-excimer laser assisted modification of amorphous hydrogenated Si/Ge bilayers to graded epitaxial heterostructures. Thin Solid Films, 2008, 517, 222-226.	1.8	5
52	Growth and modification of thin a-Si:H/a-Ge:H bi-layers to sacrificial c-SiGe alloys through ArF-Excimer laser assisted processing. Applied Surface Science, 2008, 254, 6030-6033.	6.1	11
53	A growth rate, structure and surface morphology study of Si _{1-x-y} Ge _x C _y films deposited by ArF-LCVD in tilted geometry. Vacuum, 2008, 82, 1525-1528.	3.5	1
54	Pulsed laser deposition of silicon-substituted hydroxyapatite coatings. Vacuum, 2008, 82, 1383-1385.	3.5	23

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55	Osseointegration of Calcium Phosphate Nanofilms on Titanium Alloy Implants. Key Engineering Materials, 2007, 361-363, 645-648.	0.4	1
56	In Vitro Evaluation of Combined Laser Processing on Ti6Al4V Discs: Macrostructuring and Pulsed Laser Deposition. Key Engineering Materials, 2007, 361-363, 625-628.	0.4	1
57	Calibration of Raman Spectroscopy at 1064 nm for Beeswax Quantification. Applied Spectroscopy, 2007, 61, 1259-1264.	2.2	4
58	Study of the composition transfer in the pulsed laser deposition of silicon substituted hydroxyapatite thin films. Applied Surface Science, 2007, 253, 8282-8286.	6.1	27
59	Pulsed laser deposition of silicon substituted hydroxyapatite coatings from synthetical and biological sources. Applied Surface Science, 2007, 254, 1189-1193.	6.1	38
60	Analysis of plume deflection in the silicon laser ablation process. Applied Physics A: Materials Science and Processing, 2007, 88, 667-671.	2.3	6
61	Analysis of excimer laser annealing of amorphous SiGe on La2O3//Si structures. Applied Surface Science, 2007, 253, 7957-7963.	6.1	8
62	Numerical analysis of Excimer laser assisted processing of multi-layers for the tailored dehydrogenation of amorphous and nano-crystalline silicon films. Applied Surface Science, 2007, 254, 898-903.	6.1	5
63	High-resolution electron microscopy study of SiGeC thin films grown on Si(100) by laser-assisted techniques. Applied Surface Science, 2006, 252, 4527-4530.	6.1	0
64	UV-laser-assisted processing of thin silicon-germanium-carbon films. Thin Solid Films, 2006, 508, 48-52.	1.8	11
65	Influence of Substrate Temperature in Plasma Assisted Pulsed Laser Deposition of Hydroxyapatite Thin Films. Materials Science Forum, 2006, 514-516, 1029-1033.	0.3	0
66	Biomorphic Silicon Carbide Ceramics Coated with Bioactive Glass for Medical Applications. Materials Science Forum, 2006, 514-516, 970-974.	0.3	4
67	Nuevas tecnologías en el procesamiento de recubrimientos de cerámicas bioactivas. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2006, 45, 65-69.	1.9	1
68	Estudio de la Citotoxicidad de Cerámicas Biomiméticas de SiC Recubiertas con Vidrio Bioactivo. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2006, 45, 109-114.	1.9	7
69	Analytical and numerical calculations of the temperature distribution in Si and Ge targets irradiated by excimer lasers. Applied Surface Science, 2005, 248, 455-460.	6.1	17
70	Compositional, structural and optical properties of Si-rich a-SiC:H thin films deposited by ArF-LCVD. Applied Surface Science, 2005, 248, 113-117.	6.1	19
71	Pulsed laser deposition of hydroxylapatite thin films on biomorphic silicon carbide ceramics. Applied Surface Science, 2005, 248, 355-359.	6.1	26
72	Plasma assisted pulsed laser deposition of hydroxylapatite thin films. Applied Surface Science, 2005, 248, 360-364.	6.1	18

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73	Pulsed laser deposition of bioactive glass films in ammonia and disilane atmospheres. Applied Surface Science, 2005, 248, 369-375.	6.1	7
74	Influence of the substrate temperature on the structure of Ge containing thin films produced by ArF laser induced chemical vapour deposition. Applied Surface Science, 2005, 248, 108-112.	6.1	4
75	Finite elements analysis of heteroepitaxial SiGe layers grown by excimer laser. Applied Surface Science, 2005, 248, 461-465.	6.1	12
76	The role of the thickness and the substrate on the in vitro bioactivity of silica-based glass coatings. Materials Science and Engineering C, 2005, 25, 187-193.	7.3	19
77	Evaluation of the Glass Bioactivity Grade by IR Analysis and the Stevels Parameter. Key Engineering Materials, 2005, 284-286, 465-468.	0.4	8
78	Influence of the Network Modifier Content on the Bioactivity of Silicate Glasses. Key Engineering Materials, 2004, 254-256, 23-26.	0.4	16
79	Extensive Studies on Biomorphous SiC Ceramics Properties for Medical Applications. Key Engineering Materials, 2004, 254-256, 1029-1032.	0.4	19
80	In Vitro Bioactivity Study of PLD-Coatings and Bulk Bioactive Glasses. Key Engineering Materials, 2004, 254-256, 355-358.	0.4	3
81	Study of the stoichiometry transfer in pulsed laser deposition of bioactive silica-based glasses. Thin Solid Films, 2004, 453-454, 219-223.	1.8	32
82	Laser assisted integrated processing of SiGeC films on silicon. Thin Solid Films, 2004, 453-454, 46-51.	1.8	2
83	The role of the reactive atmosphere in pulsed laser deposition of bioactive glass films. Thin Solid Films, 2004, 453-454, 224-228.	1.8	34
84	The role of the temperature and laser fluence on the properties of PLD bioactive glass films. Applied Physics A: Materials Science and Processing, 2004, 79, 983-986.	2.3	15
85	Growth and modification of thin SiGeC films at low substrate temperatures through UV laser assisted processing. Applied Surface Science, 2004, 234, 422-428.	6.1	6
86	New biomorphous SiC ceramics coated with bioactive glass for biomedical applications. Biomaterials, 2003, 24, 4827-4832.	11.4	154
87	Influence of laser fluence in ArF-excimer laser assisted crystallisation of a-SiGe:H films. Applied Surface Science, 2003, 208-209, 358-363.	6.1	11
88	ArF-excimer laser induced chemical vapour deposition of amorphous hydrogenated SiGeC films. Applied Surface Science, 2003, 208-209, 682-687.	6.1	8
89	Raman spectroscopic study of bioactive silica based glasses. Journal of Non-Crystalline Solids, 2003, 320, 92-99.	3.1	127
90	FTIR and XPS studies of bioactive silica based glasses. Journal of Non-Crystalline Solids, 2003, 332, 20-27.	3.1	315

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91	<title>Crystallization of 500-nm-thick a-SiGe:H films through ArF-excimer laser radiation</title>. , 2003, , .		0
92	Ageing of pulsed-laser-deposited bioactive glass films. Vacuum, 2002, 67, 647-651.	3.5	30
93	Laser crystallisation of poly-SiGe for microbolometers. Applied Surface Science, 2002, 186, 166-172.	6.1	12
94	Influence of the non-bridging oxygen groups on the bioactivity of silicate glasses. Journal of Materials Science: Materials in Medicine, 2002, 13, 1221-1225.	3.6	175
95	Processing of Bioglass Coatings by Excimer Laser Ablation. Key Engineering Materials, 2001, 192-195, 635-638.	0.4	15
96	Photo-induced deposition and characterization of variable bandgap a-SiN:H alloy films. Applied Surface Science, 2000, 168, 52-56.	6.1	16
97	Characterization of Si-rich a-Si $_{1-x}$ N $_x$:H alloys deposited by laser-CVD. Applied Surface Science, 1999, 138-139, 383-387.	6.1	3
98	Calcium phosphate coatings grown at different substrate temperatures by pulsed ArF-laser deposition. Thin Solid Films, 1998, 317, 363-366.	1.8	60
99	Physicochemical properties of calcium phosphate coatings produced by pulsed laser deposition at different water vapour pressures. Biomaterials, 1998, 19, 883-888.	11.4	77
100	Oxidation processes in hydrogenated amorphous silicon nitride films deposited by ArF laser-induced CVD at low temperatures. Thin Solid Films, 1998, 317, 214-218.	1.8	18
101	Comparison of modifications induced by ArF excimer laser irradiation on silicon nitride films deposited by different LCVD methods. Surface and Coatings Technology, 1998, 100-101, 393-397.	4.8	7
102	High resolution electron microscopy and x-ray photoelectron spectroscopy studies of heteroepitaxial Si $_x$ Ge(1 \hat{a} \sim x) alloys produced through laser induced processing. Applied Physics Letters, 1998, 72, 2877-2879.	3.3	15
103	Capas de a-SiN:H modificadas mediante la irradiaci3n con un lser de exc3mero. Revista De Metalurgia, 1998, 34, 164-169.	0.5	1
104	Producci3n y tratamiento de pel3culas de Si_{1-x}Ge_x mediante t3cnicas asistidas por lser de exc3mero. Revista De Metalurgia, 1998, 34, 78-81.	0.5	0
105	X-ray diffraction and x-ray photoelectron spectroscopy study of partially strained SiGe layers produced via excimer laser processing. Journal of Applied Physics, 1997, 82, 147-154.	2.5	12
106	Carbon nitride films prepared by excimer laser ablation. Applied Surface Science, 1997, 109-110, 380-383.	6.1	44
107	Modification of silicon nitride films to oxynitrides by ArF excimer laser irradiation. Surface and Coatings Technology, 1996, 80, 211-215.	4.8	11
108	Laser-induced integrated processing for heteroepitaxial Si $_x$ Ge(1 \hat{a} \sim x) alloys. Applied Surface Science, 1996, 102, 42-46.	6.1	8

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109	Photochemical vapour deposition of hydrogenated amorphous silicon-carbon thin films by using a Xe ²⁺ — excimer lamp. Applied Surface Science, 1996, 106, 55-59.	6.1	5
110	ArF excimer laser epitaxy of Si _x Ge _{1-x} alloys studied by XRD and XPS. Applied Surface Science, 1996, 106, 179-185.	6.1	9
111	Amorphous germanium layers prepared by UV-photo-induced chemical vapour deposition. Applied Surface Science, 1996, 106, 75-79.	6.1	18
112	Role of silylene in the deposition of hydrogenated amorphous silicon. The Journal of Physical Chemistry, 1991, 95, 9302-9310.	2.9	29
113	Hydrogenated Amorphous Silicon by Infrared Multiphoton Absorption with a Pulsed CO ₂ Laser. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1990, 94, 1105-1110.	0.9	8
114	ArF laser CVD of hydrogenated amorphous silicon: The role of buffer gases. Applied Physics A: Solids and Surfaces, 1989, 48, 405-414.	1.4	24