

Gianni Barucca

List of Publications by Year in descending order

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127
papers

2,487
citations

218592

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127
docs citations

127
times ranked

2880
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural details and magnetic order of $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$ ($x < 0.3$). <i>Physical Review B</i> , 1999, 59, 1068-1078.	1.1	321
2	Structure evolution of a WE43 Mg alloy submitted to different thermal treatments. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 479, 37-44.	2.6	116
3	Structural characterization of biomedical Co-Cr-Mo components produced by direct metal laser sintering. <i>Materials Science and Engineering C</i> , 2015, 48, 263-269.	3.8	110
4	Comparative toxicity of CuO nanoparticles and CuSO ₄ in rainbow trout. <i>Ecotoxicology and Environmental Safety</i> , 2013, 97, 40-46.	2.9	87
5	Effects of thermal treatments on microstructure and mechanical properties of a Co-Cr-Mo-W biomedical alloy produced by laser sintering. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 60, 106-117.	1.5	86
6	Formation and evolution of the hardening precipitates in a Mg-Y-Nd alloy. <i>Acta Materialia</i> , 2011, 59, 4151-4158.	3.8	85
7	Normal and anomalous codeposition of Zn-Ni alloys from chloride bath. <i>Journal of Applied Electrochemistry</i> , 2000, 30, 173-179.	1.5	83
8	Modified TiO ₂ particles differentially affect human skin fibroblasts exposed to UVA light. <i>Free Radical Biology and Medicine</i> , 2010, 49, 408-415.	1.3	61
9	Effects of copper doping in MgB ₂ superconductor. <i>Solid State Communications</i> , 2002, 121, 497-500.	0.9	47
10	Hardening nanostructures in an AlZnMg alloy. <i>Philosophical Magazine</i> , 2007, 87, 3297-3323.	0.7	44
11	Designing new ferrite/manganite nanocomposites. <i>Nanoscale</i> , 2016, 8, 2081-2089.	2.8	43
12	A novel thermal treatment on a Mg _{4.2} Y _{2.3} Nd _{0.6} Zr (WE43) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 494, 445-448.	2.6	42
13	Transformation of industrial and organic waste into titanium doped activated carbon-cellulose nanocomposite for rapid removal of organic pollutants. <i>Journal of Hazardous Materials</i> , 2022, 423, 126958.	6.5	40
14	Effects of build orientation and element partitioning on microstructure and mechanical properties of biomedical Ti-6Al-4V alloy produced by laser sintering. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 71, 1-9.	1.5	39
15	Flexible Magnetoreceptor with Tunable Intrinsic Logic for On-Skin Touchless Human-Machine Interfaces. <i>Advanced Functional Materials</i> , 2021, 31, 2101089.	7.8	38
16	Phase separation as origin of the magnetic anomalies in La _{0.85} Sr _{0.15} CoO ₃ . <i>Journal of Applied Physics</i> , 2001, 89, 5606-5609.	1.1	36
17	Title is missing!. <i>Journal of Applied Electrochemistry</i> , 1999, 29, 637-645.	1.5	35
18	Biomedical Co-Cr-Mo Components Produced by Direct Metal Laser Sintering1. <i>Materials Today: Proceedings</i> , 2016, 3, 889-897.	0.9	33

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19	Tuning the Magnetic Properties of Hard-Soft $\text{SrFe}_{12}\text{O}_{19}/\text{CoFe}_2\text{O}_4$ Nanostructures via Composition/Interphase Coupling. <i>Journal of Physical Chemistry C</i> , 2021, 125, 5927-5936.	1.5	33
20	Characterization of C-N thin films deposited by reactive excimer laser ablation of graphite targets in nitrogen atmosphere. <i>Thin Solid Films</i> , 1997, 307, 54-59.	0.8	32
21	DNA damage and repair following <i>in vitro</i> exposure to two different forms of titanium dioxide nanoparticles on trout erythrocyte. <i>Environmental Toxicology</i> , 2014, 29, 117-127.	2.1	32
22	Nb clusters formation in Nb-doped magnesium hydride. <i>Applied Physics Letters</i> , 2005, 87, 061904.	1.5	31
23	Characterization and Optimization of Level Measurement by an Ultrasonic Sensor System. <i>IEEE Sensors Journal</i> , 2019, 19, 3077-3084.	2.4	29
24	Carbon nitride films deposited by reactive laser ablation. <i>Applied Surface Science</i> , 1998, 127-129, 481-485.	3.1	28
25	Mechanism of magnetic heating in Mn-doped magnetite nanoparticles and the role of intertwined structural and magnetic properties. <i>Nanoscale</i> , 2019, 11, 10896-10910.	2.8	27
26	Precision resonance energy scans with the PANDA experiment at FAIR. <i>European Physical Journal A</i> , 2019, 55, 1.	1.0	27
27	Encapsulation of vitamin B12 into nanoengineered capsules and soft matter nanosystems for targeted delivery. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 182, 110366.	2.5	26
28	Tunable single-phase magnetic behavior in chemically synthesized $\text{AFeO}_3/\text{MFe}_2\text{O}_4$ (A = Bi or La, M = Co or Ni) nanocomposites. <i>Nanoscale</i> , 2018, 10, 22990-23000.	2.8	25
29	Effects of annealing on the microstructure of yttria-stabilised zirconia thin films deposited by laser ablation. <i>Thin Solid Films</i> , 2005, 478, 125-131.	0.8	23
30	Phase transformations in QE22 Mg alloy. <i>Acta Materialia</i> , 2009, 57, 4416-4425.	3.8	23
31	Symbiotic, low-temperature, and scalable synthesis of bi-magnetic complex oxide nanocomposites. <i>Nanoscale Advances</i> , 2020, 2, 851-859.	2.2	22
32	Controlling magnetic coupling in bi-magnetic nanocomposites. <i>Nanoscale</i> , 2019, 11, 14256-14265.	2.8	21
33	Synthesis of nanogranular Fe_3O_4 /biomimetic hydroxyapatite for potential applications in nanomedicine: structural and magnetic characterization. <i>Materials Research Express</i> , 2015, 2, 065002.	0.8	20
34	Electron microscopy characterization of Al-Sn metal-metal matrix composites. <i>Journal of Alloys and Compounds</i> , 1994, 215, 309-313.	2.8	19
35	Giant magneto-optical response in H^+ irradiated $\text{Zn}_{1-x}\text{Co}_x\text{O}$ thin films. <i>Journal of Materials Chemistry C</i> , 2019, 7, 78-85.	2.7	19
36	Novel mixed precursor approach to prepare multiferroic nanocomposites with enhanced interfacial coupling. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 511, 166792.	1.0	19

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37	Spinel Iron Oxide by the Co-Precipitation Method: Effect of the Reaction Atmosphere. Applied Sciences (Switzerland), 2021, 11, 5433.	1.3	19
38	New carbon nitride phase coherently grown on Si(111). Journal of Applied Physics, 1999, 86, 2014-2019.	1.1	18
39	Phase separation, thermal history and magnetic behaviour of Sr doped LaCoO ₃ . Journal of Physics Condensed Matter, 2000, 12, 9761-9770.	0.7	18
40	Structure evolution of EV31 Mg alloy. Journal of Alloys and Compounds, 2008, 463, 200-206.	2.8	18
41	Magnetic exchange coupling in IrMnNiFe multilayers: From the continuous film to dot arrays. Physical Review B, 2015, 91, .		
42	Structural, mechanical and light yield characterisation of heat treated LYSO:Ce single crystals for medical imaging applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 785, 110-116.	0.7	18
43	Growth and characterization of SiC layers obtained by microwave-CVD. Thin Solid Films, 2001, 383, 169-171.	0.8	17
44	Towards bi-magnetic nanocomposites as permanent magnets through the optimization of the synthesis and magnetic properties of SrFe ₁₂ O ₁₉ nanocrystallites. Journal Physics D: Applied Physics, 2021, 54, 124004.	1.3	17
45	Precipitates formation and evolution in a Co-based alloy produced by powder bed fusion. Journal of Alloys and Compounds, 2019, 797, 652-658.	2.8	16
46	Encapsulation of a Neutral Molecule into a Cationic Clay Material: Structural Insight and Cytotoxicity of Resveratrol/Layered Double Hydroxide/BSA Nanocomposites. Nanomaterials, 2020, 10, 33.	1.9	16
47	Wavy graphene sheets from electrochemical sewing of corannulene. Chemical Science, 2021, 12, 8048-8057.	3.7	15
48	Easy plasma nano-texturing of PTFE surface: From pyramid to unusual spherules-on-pyramid features. Applied Surface Science, 2019, 483, 60-68.	3.1	14
49	Large area microcrystalline silicon films grown by ECR-CVD. Thin Solid Films, 2001, 383, 181-184.	0.8	13
50	Polycrystalline SiC growth and characterization. Applied Surface Science, 2004, 238, 331-335.	3.1	13
51	Microstructure analysis on polycrystalline 3C-SiC thin films. Diamond and Related Materials, 2005, 14, 1134-1137.	1.8	13
52	Hydrogen storage properties of Pd-doped thermally oxidized single wall carbon nanohorns. Journal of Alloys and Compounds, 2015, 645, S485-S489.	2.8	13
53	L10-FeNi films on Au-Cu-Ni buffer-layer: a high-throughput combinatorial study. Scientific Reports, 2018, 8, 15919.	1.6	13
54	The addition of silver affects the deformation mechanism of a twinning-induced plasticity steel: Potential for thinner degradable stents. Acta Biomaterialia, 2019, 98, 103-113.	4.1	13

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55	Highly Textured FeCo Thin Films Deposited by Low Temperature Pulsed Laser Deposition. ACS Applied Materials & Interfaces, 2015, 7, 22341-22347.	4.0	12
56	Co/Pd-Based synthetic antiferromagnetic thin films on Au/resist underlayers: towards biomedical applications. Nanoscale, 2019, 11, 21891-21899.	2.8	12
57	Intermixing at interfaces of Fe/W multilayers. Materials Science and Engineering C, 2002, 19, 139-143.	3.8	11
58	Excimer pulsed laser deposition and annealing of YSZ nanometric films on Si substrates. Applied Surface Science, 2005, 248, 270-275.	3.1	11
59	Plasma deposited Pt-containing hydrocarbon thin films as electrocatalysts for PEM fuel cell. Journal of Materials Chemistry, 2010, 20, 10224.	6.7	11
60	Study of microstructure and magnetization reversal mechanism in granular CoCrPt:SiO ₂ films of variable thickness. Materials Chemistry and Physics, 2013, 141, 790-796.	2.0	11
61	Magnetic anisotropy phase-graded Al/L1 ₀ -FePt films on amorphous glass substrates. Materials and Design, 2017, 123, 147-153.	3.3	11
62	A new micromechanical approach for the preparation of graphene nanoplatelets deposited on polyethylene. Nanotechnology, 2017, 28, 194001.	1.3	11
63	LaFeO ₃ -CoFe ₂ O ₄ bi-magnetic composite thin films prepared using an all-in-one synthesis technique. Journal of Magnetism and Magnetic Materials, 2020, 503, 166622.	1.0	11
64	Exploring the magnetic properties and magnetic coupling in SrFe ₁₂ O ₁₉ /Co _{1-x} Zn _x Fe ₂ O ₄ nanocomposites. Journal of Magnetism and Magnetic Materials, 2021, 535, 168095.	1.0	11
65	Complex correlations between microstructure and magnetic behavior in SrFe ₁₂ O ₁₉ hexaferrite nanoparticles. Scientific Reports, 2021, 11, 23307.	1.6	11
66	Si/SiGe modulation-doped heterostructures grown on silicon-on-insulator substrates for high-mobility two-dimensional electron gases. Applied Physics Letters, 2001, 79, 2031-2033.	1.5	10
67	Structure modification of Mg-Nb films under hydrogen sorption cycles. Journal of Alloys and Compounds, 2011, 509, S572-S575.	2.8	10
68	Thick pure Ge films for photodetectors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 1754.	1.6	9
69	Heteroepitaxy of 3C-SiC by electron cyclotron resonance-CVD technique. Applied Surface Science, 2001, 184, 43-49.	3.1	9
70	Characterization of polycrystalline SiC layers grown by ECR-PECVD for micro-electro-mechanical systems. Thin Solid Films, 2003, 427, 187-190.	0.8	9
71	On the Growth of Nano-Structures on c-Silicon via Self-Masked Plasma Etching Processes. Plasma Processes and Polymers, 2013, 10, 843-849.	1.6	9
72	On the formation of nanocapsules in aerosol-assisted atmospheric pressure plasma. Plasma Processes and Polymers, 2019, 16, 1900116.	1.6	9

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73	Perpendicularly magnetized Co/Pd-based magneto-resistive heterostructures on flexible substrates. <i>Nanoscale Advances</i> , 2021, 3, 3076-3084.	2.2	9
74	Deposition of microcrystalline silicon-carbon alloys in low power regime. <i>Journal of Non-Crystalline Solids</i> , 2004, 338-340, 163-167.	1.5	8
75	Quality Control and Structural Assessment of Anisotropic Scintillating Crystals. <i>Crystals</i> , 2019, 9, 376.	1.0	8
76	Influence of the Thermomechanical Characteristics of Low-Density Polyethylene Substrates on the Thermoresistive Properties of Graphite Nanoplatelet Coatings. <i>Coatings</i> , 2021, 11, 332.	1.2	8
77	Disclosing the Nature of Asymmetric Interface Magnetism in Co/Pt Multilayers. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 12766-12776.	4.0	8
78	a-SiN:H multilayer versus bulk structure: a real improvement of radiative efficiency?. <i>Journal of Non-Crystalline Solids</i> , 2000, 266-269, 1062-1066.	1.5	7
79	Focused ion beam surface treatments of single crystal zinc oxide for device fabrication. <i>Materials and Design</i> , 2016, 112, 530-538.	3.3	7
80	Exchange bias properties of 140 nm-sized dipolarly interacting circular dots with ultrafine IrMn and NiFe layers. <i>Journal of Magnetism and Magnetic Materials</i> , 2016, 400, 242-247.	1.0	7
81	Optical and electrical characterizations of graphene nanoplatelet coatings on low density polyethylene. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2018, 36, .	0.6	7
82	Solid-State Phase Transformations in Thermally Treated Ti-6Al-4V Alloy Fabricated via Laser Powder Bed Fusion. <i>Materials</i> , 2019, 12, 2876.	1.3	7
83	Thermoresistive Properties of Graphite Platelet Films Supported by Different Substrates. <i>Materials</i> , 2019, 12, 3638.	1.3	7
84	Crystallisation of perovskite PZT films on MgO substrates. <i>Thin Solid Films</i> , 1998, 319, 207-210.	0.8	6
85	Intermixing in immiscible Co/Ag/Co trilayers under XeCl laser annealing. <i>Thin Solid Films</i> , 1999, 343-344, 206-209.	0.8	6
86	Characterization of silicon carbide thin films grown on Si and SiO ₂ /Si substrates. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004, 114-115, 279-283.	1.7	6
87	Morphological and structural characterizations of CrSi ₂ nanometric films deposited by laser ablation. <i>Applied Surface Science</i> , 2007, 254, 1224-1227.	3.1	6
88	Cross-Contamination Quantification in Powders for Additive Manufacturing: A Study on Ti-6Al-4V and Maraging Steel. <i>Materials</i> , 2019, 12, 2342.	1.3	6
89	Dipolar Magnetic Interactions in Mn-Doped Magnetite Nanoparticles Loaded into PLGA Nanocapsules for Nanomedicine Applications. <i>Journal of Physical Chemistry C</i> , 2019, 123, 30007-30020.	1.5	6
90	Combined Bottom-Up and Top-Down Approach for Highly Ordered One-Dimensional Composite Nanostructures for Spin Insulatronics. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 37500-37509.	4.0	6

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91	Optical and structural properties of SiC layers grown by an electron cyclotron resonance CVD technique. <i>Diamond and Related Materials</i> , 2001, 10, 1264-1267.	1.8	5
92	Monoclinic carbon nitride phase coherently grown on Si (001) substrates. <i>Journal of Applied Physics</i> , 2001, 89, 3494-3497.	1.1	5
93	New insights on amorphous silicon-nitride microcavities. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003, 16, 591-595.	1.3	5
94	Single Step Plasma Deposition of Platinum-Fluorocarbon Nanocomposite Films as Electrocatalysts of Interest for Micro Fuel Cells Technology. <i>Plasma Processes and Polymers</i> , 2014, 11, 1068-1075.	1.6	5
95	Ledge-type Co/L1-FePt exchange-coupled composites. <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	5
96	Surface modification of L605 by oxygen plasma immersion ion implantation for biomedical applications. <i>MRS Communications</i> , 2018, 8, 1404-1412.	0.8	5
97	Graphite platelet films deposited by spray technique on low density polyethylene substrates. <i>Materials Today: Proceedings</i> , 2020, 20, 87-90.	0.9	5
98	The potential of λ and χ studies with PANDA at FAIR. <i>European Physical Journal A</i> , 2021, 57, 1.	1.0	5
99	Hybrid Spinel Iron Oxide Nanoarchitecture Combining Crystalline and Amorphous Parent Material. <i>Journal of Physical Chemistry C</i> , 2021, 125, 10611-10620.	1.5	5
100	MICROSTRUCTURES OF SPUTTERED ORIENTED Si/CeO ₂ BILAYERS/Ba ₂ Cu ₃ O ₇ - $\hat{\Gamma}$ /Si INTEGRATED MICROELECTRONICS. <i>International Journal of Modern Physics B</i> , 2003, 17, 848-854.	1.0	4
101	Structural and magnetic properties of exchange-spring FeTaN/FeSm/FeTaN multilayers. <i>Surface Science</i> , 2004, 566-568, 285-290.	0.8	4
102	Glassy Magnetic Behavior and Correlation Length in Nanogranular Fe-Oxide and Au/Fe-Oxide Samples. <i>Materials</i> , 2019, 12, 3958.	1.3	4
103	Magnetic Nanoparticles Coated with (<i>R</i>)-9-Acetoxy stearic Acid for Biomedical Applications. <i>ACS Omega</i> , 2020, 5, 12707-12715.	1.6	4
104	<title>Laser reactive ablation deposition of carbon nitride thin films</title>. , 1996, 2789, 293.		3
105	Strain relaxation through islands formation in epitaxial SiGe thin films. <i>Applied Surface Science</i> , 1996, 102, 73-77.	3.1	3
106	Zn nanoparticle formation in FIB irradiated single crystal ZnO. <i>Applied Surface Science</i> , 2018, 433, 899-903.	3.1	3
107	Laser Powder Bed Fusion: tailoring the microstructure of alloys for biomedical applications. <i>Materials Today: Proceedings</i> , 2019, 19, 24-32.	0.9	3
108	Powder Bed Fusion of Biomedical Co-Cr-Mo and Ti-6Al-4V Alloys: Microstructure and Mechanical Properties. <i>Advanced Materials Research</i> , 2019, 1151, 3-7.	0.3	3

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109	Photoluminescence investigation of short period silicon-germanium heterostructures grown using molecular beam epitaxy. <i>Surface Science</i> , 1999, 437, 145-153.	0.8	2
110	Electrical properties of high-mobility two-dimensional electron gases in Si/SiGe modulation-doped heterostructures grown on silicon-on-insulator substrates. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 89, 346-349.	1.7	2
111	Magnesium growth in magnesium deuteride thin films during deuterium desorption. <i>Journal of Alloys and Compounds</i> , 2013, 580, S29-S32.	2.8	2
112	Kinetic behaviour of a metal-polymer composite suitable for hydrogen storage applications. <i>International Journal of Nanotechnology</i> , 2014, 11, 829.	0.1	2
113	Titanium Carbide Films Deposited by Laser Reactive Ablation. <i>Materials Research Society Symposia Proceedings</i> , 1994, 337, 577.	0.1	1
114	Effects of cobalt thin films on the a-Si crystallisation induced by excimer laser irradiation. <i>Applied Surface Science</i> , 1999, 138-139, 145-149.	3.1	1
115	Strain-driven morphology of Si _{1-x} Ge _x islands grown on Si(100). <i>Micron</i> , 2000, 31, 315-321.	1.1	1
116	Effect of oxygen post-annealing on the magnetoresistance of highly epitaxial La _{0.7} Ca _{0.3} MnO ₃ thin films. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E1501-E1502.	1.0	1
117	Structural and Electrical Characterizations of Polymer-Supported Graphene Fabricated by Graphite Nanoplatelets. , 2016, , .		1
118	Investigation of magnetic coupling in FePt/spacer/FePt trilayers. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 445002.	1.3	1
119	Synthesis of Ti ₂ N-TiSi ₂ Layers by One-Step Excimer Laser Irradiation. <i>Materials Research Society Symposia Proceedings</i> , 1992, 279, 679.	0.1	0
120	<title>Parametric study of C-N films deposited by reactive laser ablation</title>. , 1997, , .		0
121	Short period (Si ₆ Ge ₄) _p superlattices: photoluminescence and electron microscopy study. <i>Journal of Luminescence</i> , 1998, 80, 509-513.	1.5	0
122	Structural Properties of 3C-SiC Layers Grown on Si Substrates by Electron Cyclotron Resonance CVD Technique. <i>Materials Research Society Symposia Proceedings</i> , 2000, 640, 1.	0.1	0
123	<title>Carbon nitride coherently grown on Si (111) substrates by pulsed laser irradiation</title>. , 2000, 4070, 262.		0
124	<title>Parametric studies of carbon nitride thin films deposited by reactive pulsed laser ablation</title>. , 2000, 4070, 220.		0
125	Microstructural Characterization of Thin Films Obtained by Laser Irradiation. <i>Microscopy Microanalysis Microstructures</i> , 1995, 6, 685-692.	0.4	0
126	Physics of Matter: From the Nanoscale Structure to the Macroscopic Properties of Materials. , 2019, , 207-221.		0

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127	Structural and Electrical Properties of Graphite Platelet Films Deposited on Low-Density Polyethylene Substrate. Materials Proceedings, 2020, 4, .	0.2	0