

Gianni Barucca

List of Publications by Year in descending order

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127
papers

2,487
citations

218677

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2880
citing authors

#	ARTICLE	IF	CITATIONS
1	Transformation of industrial and organic waste into titanium doped activated carbon â€^{e} cellulose nanocomposite for rapid removal of organic pollutants. <i>Journal of Hazardous Materials</i> , 2022, 423, 126958.	12.4	40
2	Disclosing the Nature of Asymmetric Interface Magnetism in Co/Pt Multilayers. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 12766-12776.	8.0	8
3	Perpendicularly magnetized Co/Pd-based magneto-resistive heterostructures on flexible substrates. <i>Nanoscale Advances</i> , 2021, 3, 3076-3084.	4.6	9
4	Towards bi-magnetic nanocomposites as permanent magnets through the optimization of the synthesis and magnetic properties of $\text{SrFe}_{12}\text{O}_{19}$ nanocrystallites. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 124004.	2.8	17
5	Influence of the Thermomechanical Characteristics of Low-Density Polyethylene Substrates on the Thermoresistive Properties of Graphite Nanoplatelet Coatings. <i>Coatings</i> , 2021, 11, 332.	2.6	8
6	Tuning the Magnetic Properties of Hard â€^{e} 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.	3.1	33
7	Flexible Magnetoreceptor with Tunable Intrinsic Logic for On â€^{e} Skin Touchless Human â€^{e} Machine Interfaces. <i>Advanced Functional Materials</i> , 2021, 31, 2101089.	14.9	38
8	The potential of $\text{\$}\varLambda$ and $\text{\$}\varXi$ studies with PANDA at FAIR. <i>European Physical Journal A</i> , 2021, 57, 1.	2.5	5
9	Hybrid Spinel Iron Oxide Nanoarchitecture Combining Crystalline and Amorphous Parent Material. <i>Journal of Physical Chemistry C</i> , 2021, 125, 10611-10620.	3.1	5
10	Spinel Iron Oxide by the Co-Precipitation Method: Effect of the Reaction Atmosphere. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 5433.	2.5	19
11	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.	8.0	6
12	Exploring the magnetic properties and magnetic coupling in $\text{SrFe}_{12}\text{O}_{19}/\text{Co}_{1-x}\text{Zn}_x\text{Fe}_2\text{O}_4$ nanocomposites. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 535, 168095.	2.3	11
13	Wavy graphene sheets from electrochemical sewing of corannulene. <i>Chemical Science</i> , 2021, 12, 8048-8057.	7.4	15
14	Complex correlations between microstructure and magnetic behavior in $\text{SrFe}_{12}\text{O}_{19}$ hexaferrite nanoparticles. <i>Scientific Reports</i> , 2021, 11, 23307.	3.3	11
15	Graphite platelet films deposited by spray technique on low density polyethylene substrates. <i>Materials Today: Proceedings</i> , 2020, 20, 87-90.	1.8	5
16	Encapsulation of a Neutral Molecule into a Cationic Clay Material: Structural Insight and Cytotoxicity of Resveratrol/Layered Double Hydroxide/BSA Nanocomposites. <i>Nanomaterials</i> , 2020, 10, 33.	4.1	16
17	Novel mixed precursor approach to prepare multiferroic nanocomposites with enhanced interfacial coupling. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 511, 166792.	2.3	19
18	Magnetic Nanoparticles Coated with (<i>R</i>)-9-Acetoxy stearic Acid for Biomedical Applications. <i>ACS Omega</i> , 2020, 5, 12707-12715.	3.5	4

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19	LaFeO ₃ -CoFe ₂ O ₄ bi-magnetic composite thin films prepared using an all-in-one synthesis technique. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 503, 166622.	2.3	11
20	Symbiotic, low-temperature, and scalable synthesis of bi-magnetic complex oxide nanocomposites. <i>Nanoscale Advances</i> , 2020, 2, 851-859.	4.6	22
21	Structural and Electrical Properties of Graphite Platelet Films Deposited on Low-Density Polyethylene Substrate. <i>Materials Proceedings</i> , 2020, 4, .	0.2	0
22	On the formation of nanocapsules in aerosol-assisted atmospheric pressure plasma. <i>Plasma Processes and Polymers</i> , 2019, 16, 1900116.	3.0	9
23	Controlling magnetic coupling in bi-magnetic nanocomposites. <i>Nanoscale</i> , 2019, 11, 14256-14265.	5.6	21
24	Encapsulation of vitamin B12 into nanoengineered capsules and soft matter nanosystems for targeted delivery. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 182, 110366.	5.0	26
25	Cross-Contamination Quantification in Powders for Additive Manufacturing: A Study on Ti-6Al-4V and Maraging Steel. <i>Materials</i> , 2019, 12, 2342.	2.9	6
26	Quality Control and Structural Assessment of Anisotropic Scintillating Crystals. <i>Crystals</i> , 2019, 9, 376.	2.2	8
27	Laser Powder Bed Fusion: tailoring the microstructure of alloys for biomedical applications. <i>Materials Today: Proceedings</i> , 2019, 19, 24-32.	1.8	3
28	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.	3.1	6
29	Solid-State Phase Transformations in Thermally Treated Ti-6Al-4V Alloy Fabricated via Laser Powder Bed Fusion. <i>Materials</i> , 2019, 12, 2876.	2.9	7
30	Giant magneto-optical response in H ⁺ irradiated Zn _{1-x} Co _x O thin films. <i>Journal of Materials Chemistry C</i> , 2019, 7, 78-85.	5.5	19
31	Precipitates formation and evolution in a Co-based alloy produced by powder bed fusion. <i>Journal of Alloys and Compounds</i> , 2019, 797, 652-658.	5.5	16
32	The addition of silver affects the deformation mechanism of a twinning-induced plasticity steel: Potential for thinner degradable stents. <i>Acta Biomaterialia</i> , 2019, 98, 103-113.	8.3	13
33	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.	5.6	27
34	Easy plasma nano-texturing of PTFE surface: From pyramid to unusual spherules-on-pyramid features. <i>Applied Surface Science</i> , 2019, 483, 60-68.	6.1	14
35	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
36	Precision resonance energy scans with the PANDA experiment at FAIR. <i>European Physical Journal A</i> , 2019, 55, 1.	2.5	27

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37	Co/Pd-Based synthetic antiferromagnetic thin films on Au/resist underlayers: towards biomedical applications. <i>Nanoscale</i> , 2019, 11, 21891-21899.	5.6	12
38	Thermoresistive Properties of Graphite Platelet Films Supported by Different Substrates. <i>Materials</i> , 2019, 12, 3638.	2.9	7
39	Glassy Magnetic Behavior and Correlation Length in Nanogranular Fe-Oxide and Au/Fe-Oxide Samples. <i>Materials</i> , 2019, 12, 3958.	2.9	4
40	Characterization and Optimization of Level Measurement by an Ultrasonic Sensor System. <i>IEEE Sensors Journal</i> , 2019, 19, 3077-3084.	4.7	29
41	Physics of Matter: From the Nanoscale Structure to the Macroscopic Properties of Materials. , 2019, , 207-221.		0
42	Zn nanoparticle formation in FIB irradiated single crystal ZnO. <i>Applied Surface Science</i> , 2018, 433, 899-903.	6.1	3
43	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, .	1.2	7
44	Tunable single-phase magnetic behavior in chemically synthesized $AFeO_3 \hat{=} MFe_2O_4$ (A = Bi or La, M = Co or Ni) nanocomposites. <i>Nanoscale</i> , 2018, 10, 22990-23000.	5.6	25
45	Surface modification of L605 by oxygen plasma immersion ion implantation for biomedical applications. <i>MRS Communications</i> , 2018, 8, 1404-1412.	1.8	5
46	L10-FeNi films on Au-Cu-Ni buffer-layer: a high-throughput combinatorial study. <i>Scientific Reports</i> , 2018, 8, 15919.	3.3	13
47	Magnetic anisotropy phase-graded Al/L10-FePt films on amorphous glass substrates. <i>Materials and Design</i> , 2017, 123, 147-153.	7.0	11
48	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.	3.1	39
49	A new micromechanical approach for the preparation of graphene nanoplatelets deposited on polyethylene. <i>Nanotechnology</i> , 2017, 28, 194001.	2.6	11
50	Investigation of magnetic coupling in FePt/spacer/FePt trilayers. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 445002.	2.8	1
51	Structural and Electrical Characterizations of Polymer-Supported Graphene Fabricated by Graphite Nanoplatelets. , 2016, , .		1
52	Ledge-type Co/L1-FePt exchange-coupled composites. <i>Journal of Applied Physics</i> , 2016, 119, .	2.5	5
53	Focused ion beam surface treatments of single crystal zinc oxide for device fabrication. <i>Materials and Design</i> , 2016, 112, 530-538.	7.0	7
54	Biomedical Co-Cr-Mo Components Produced by Direct Metal Laser Sintering1. <i>Materials Today: Proceedings</i> , 2016, 3, 889-897.	1.8	33

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55	Designing new ferrite/manganite nanocomposites. <i>Nanoscale</i> , 2016, 8, 2081-2089.	5.6	43
56	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.	3.1	86
57	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.	2.3	7
58	Synthesis of nanogranular Fe ₃ O ₄ /biomimetic hydroxyapatite for potential applications in nanomedicine: structural and magnetic characterization. <i>Materials Research Express</i> , 2015, 2, 065002.	1.6	20
59	Magnetic exchange coupling in IrMn/NiFe multilayers: From the continuous film to dot arrays. <i>Physical Review B</i> , 2015, 91, .		
60	Hydrogen storage properties of Pd-doped thermally oxidized single wall carbon nanohorns. <i>Journal of Alloys and Compounds</i> , 2015, 645, S485-S489.	5.5	13
61	Structural, mechanical and light yield characterisation of heat treated LYSO:Ce single crystals for medical imaging applications. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 785, 110-116.	1.6	18
62	Highly Textured FeCo Thin Films Deposited by Low Temperature Pulsed Laser Deposition. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 22341-22347.	8.0	12
63	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.	7.3	110
64	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.	4.0	32
65	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.	3.0	5
66	Kinetic behaviour of a metal-polymer composite suitable for hydrogen storage applications. <i>International Journal of Nanotechnology</i> , 2014, 11, 829.	0.2	2
67	Comparative toxicity of CuO nanoparticles and CuSO ₄ in rainbow trout. <i>Ecotoxicology and Environmental Safety</i> , 2013, 97, 40-46.	6.0	87
68	Magnesium growth in magnesium deuteride thin films during deuterium desorption. <i>Journal of Alloys and Compounds</i> , 2013, 580, S29-S32.	5.5	2
69	Study of microstructure and magnetization reversal mechanism in granular CoCrPt:SiO ₂ films of variable thickness. <i>Materials Chemistry and Physics</i> , 2013, 141, 790-796.	4.0	11
70	On the Growth of Nano-Structures on c-Silicon via Self-Masked Plasma Etching Processes. <i>Plasma Processes and Polymers</i> , 2013, 10, 843-849.	3.0	9
71	Structure modification of Mg-Nb films under hydrogen sorption cycles. <i>Journal of Alloys and Compounds</i> , 2011, 509, S572-S575.	5.5	10
72	Formation and evolution of the hardening precipitates in a Mg-Y-Nd alloy. <i>Acta Materialia</i> , 2011, 59, 4151-4158.	7.9	85

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73	Modified TiO ₂ particles differentially affect human skin fibroblasts exposed to UVA light. <i>Free Radical Biology and Medicine</i> , 2010, 49, 408-415.	2.9	61
74	Plasma deposited Pt-containing hydrocarbon thin films as electrocatalysts for PEM fuel cell. <i>Journal of Materials Chemistry</i> , 2010, 20, 10224.	6.7	11
75	Phase transformations in QE22 Mg alloy. <i>Acta Materialia</i> , 2009, 57, 4416-4425.	7.9	23
76	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.	5.6	42
77	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.	5.6	116
78	Structure evolution of EV31 Mg alloy. <i>Journal of Alloys and Compounds</i> , 2008, 463, 200-206.	5.5	18
79	Hardening nanostructures in an AlZnMg alloy. <i>Philosophical Magazine</i> , 2007, 87, 3297-3323.	1.6	44
80	Morphological and structural characterizations of CrSi ₂ nanometric films deposited by laser ablation. <i>Applied Surface Science</i> , 2007, 254, 1224-1227.	6.1	6
81	Excimer pulsed laser deposition and annealing of YSZ nanometric films on Si substrates. <i>Applied Surface Science</i> , 2005, 248, 270-275.	6.1	11
82	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.	1.8	23
83	Nb clusters formation in Nb-doped magnesium hydride. <i>Applied Physics Letters</i> , 2005, 87, 061904.	3.3	31
84	Microstructure analysis on polycrystalline 3C-SiC thin films. <i>Diamond and Related Materials</i> , 2005, 14, 1134-1137.	3.9	13
85	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.	3.5	6
86	Structural and magnetic properties of exchange-spring FeTaN/FeSm/FeTaN multilayers. <i>Surface Science</i> , 2004, 566-568, 285-290.	1.9	4
87	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.	2.3	1
88	Polycrystalline SiC growth and characterization. <i>Applied Surface Science</i> , 2004, 238, 331-335.	6.1	13
89	Deposition of microcrystalline silicon-carbon alloys in low power regime. <i>Journal of Non-Crystalline Solids</i> , 2004, 338-340, 163-167.	3.1	8
90	Characterization of polycrystalline SiC layers grown by ECR-PECVD for micro-electro-mechanical systems. <i>Thin Solid Films</i> , 2003, 427, 187-190.	1.8	9

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91	New insights on amorphous silicon-nitride microcavities. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003, 16, 591-595.	2.7	5
92	MICROSTRUCTURES OF SPUTTERED ORIENTED Si/CeO ₂ BILAYERS/YBa ₂ Cu ₃ O _{7-x} /Si INTEGRATED MICROELECTRONICS. <i>International Journal of Modern Physics B</i> , 2003, 17, 848-854.	2.0	4
93	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.	3.5	2
94	Intermixing at interfaces of Fe/W multilayers. <i>Materials Science and Engineering C</i> , 2002, 19, 139-143.	7.3	11
95	Effects of copper doping in MgB ₂ superconductor. <i>Solid State Communications</i> , 2002, 121, 497-500.	1.9	47
96	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.	3.9	5
97	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.	2.5	36
98	Heteroepitaxy of 3C-SiC by electron cyclotron resonance-CVD technique. <i>Applied Surface Science</i> , 2001, 184, 43-49.	6.1	9
99	Growth and characterization of SiC layers obtained by microwave-CVD. <i>Thin Solid Films</i> , 2001, 383, 169-171.	1.8	17
100	Large area microcrystalline silicon films grown by ECR-CVD. <i>Thin Solid Films</i> , 2001, 383, 181-184.	1.8	13
101	Monoclinic carbon nitride phase coherently grown on Si (001) substrates. <i>Journal of Applied Physics</i> , 2001, 89, 3494-3497.	2.5	5
102	Si/SiGe modulation-doped heterostructures grown on silicon-on-insulator substrates for high-mobility two-dimensional electron gases. <i>Applied Physics Letters</i> , 2001, 79, 2031-2033.	3.3	10
103	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
104	Strain-driven morphology of Si _{1-x} Ge _x islands grown on Si(100). <i>Micron</i> , 2000, 31, 315-321.	2.2	1
105	Normal and anomalous codeposition of Zn-Ni alloys from chloride bath. <i>Journal of Applied Electrochemistry</i> , 2000, 30, 173-179.	2.9	83
106	<title>Carbon nitride coherently grown on Si (111) substrates by pulsed laser irradiation</title>. , 2000, 4070, 262.		0
107	<title>Parametric studies of carbon nitride thin films deposited by reactive pulsed laser ablation</title>. , 2000, 4070, 220.		0
108	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.	3.1	7

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109	Phase separation, thermal history and magnetic behaviour of Sr doped LaCoO ₃ . Journal of Physics Condensed Matter, 2000, 12, 9761-9770.	1.8	18
110	Effects of cobalt thin films on the a-Si crystallisation induced by excimer laser irradiation. Applied Surface Science, 1999, 138-139, 145-149.	6.1	1
111	Title is missing!. Journal of Applied Electrochemistry, 1999, 29, 637-645.	2.9	35
112	Intermixing in immiscible Co/Ag/Co trilayers under XeCl laser annealing. Thin Solid Films, 1999, 343-344, 206-209.	1.8	6
113	Structural details and magnetic order of La _{1-x} Sr _x CoO ₃ (x < 0.3). Physical Review B, 1999, 59, 1068-1078.	3.2	321
114	New carbon nitride phase coherently grown on Si(111). Journal of Applied Physics, 1999, 86, 2014-2019.	2.5	18
115	Photoluminescence investigation of short period silicon-germanium heterostructures grown using molecular beam epitaxy. Surface Science, 1999, 437, 145-153.	1.9	2
116	Short period (Si ₆ Ge ₄) _p superlattices: photoluminescence and electron microscopy study. Journal of Luminescence, 1998, 80, 509-513.	3.1	0
117	Crystallisation of perovskite PZT films on MgO substrates. Thin Solid Films, 1998, 319, 207-210.	1.8	6
118	Carbon nitride films deposited by reactive laser ablation. Applied Surface Science, 1998, 127-129, 481-485.	6.1	28
119	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
120	<title>Parametric study of C-N films deposited by reactive laser ablation</title>. , 1997, , .		0
121	Characterization of C-N thin films deposited by reactive excimer laser ablation of graphite targets in nitrogen atmosphere. Thin Solid Films, 1997, 307, 54-59.	1.8	32
122	<title>Laser reactive ablation deposition of carbon nitride thin films</title>. , 1996, 2789, 293.		3
123	Strain relaxation through islands formation in epitaxial SiGe thin films. Applied Surface Science, 1996, 102, 73-77.	6.1	3
124	Microstructural Characterization of Thin Films Obtained by Laser Irradiation. Microscopy Microanalysis Microstructures, 1995, 6, 685-692.	0.4	0
125	Electron microscopy characterization of Al-Sn metal-metal matrix composites. Journal of Alloys and Compounds, 1994, 215, 309-313.	5.5	19
126	Titanium Carbide Films Deposited by Laser Reactive Ablation. Materials Research Society Symposia Proceedings, 1994, 337, 577.	0.1	1

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127	Synthesis of Ti ₂ N-TiSi ₂ Layers by One-Step Excimer Laser Irradiation. Materials Research Society Symposia Proceedings, 1992, 279, 679.	0.1	0