Roberto Di Capua

List of Publications by Year
in descending order

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63 papers	1,272 citations	331670 21 h-index	377865 34 g-index
66 all docs	66 docs citations	66 times ranked	2210 citing authors

#	Article	IF	Citations
1	Emergence of coherence in the charge-density wave state of 2H-NbSe2. Nature Communications, 2015, 6, 6313.	12.8	123
2	Tunable spin polarization and superconductivity in engineered oxide interfaces. Nature Materials, 2016, 15, 278-283.	27.5	104
3	Structural and Electronic Reconstructions at the LaAlO₃/SrTiO₃ Interface. Advanced Materials, 2013, 25, 2333-2338.	21.0	72
4	Synthesis and characterization of conductive copper-based metal-organic framework/graphene-like composites. Materials Chemistry and Physics, 2014, 147, 744-750.	4.0	54
5	Wet Chemical Method for Making Graphene-like Films from Carbon Black. ACS Applied Materials & Interfaces, 2012, 4, 4491-4498.	8.0	44
6	Ferromagnetism and ferroelectricity in epitaxial BiMnO3 ultra-thin films. Applied Physics Letters, 2013, 103, .	3.3	43
7	Signatures of unconventional superconductivity in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LaAlO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi / <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:m two-dimensional system. Physical Review B, 2017, 95, .	3.2	43
8	Critical currents ofMgB2thin films depositedin situby sputtering. Physical Review B, 2003, 67, .	3.2	41
9	Effect of disorder inMgB2thin films. Physical Review B, 2005, 71, .	3.2	40
10	Effect of magnetic impurities on the vortex lattice properties in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>NbSe</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:m crystals. Physical Review B, 2008, 78, .	3.2	40
11	Observation of a two-dimensional electron gas at the surface of annealed SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>single crystals by scanning tunneling spectroscopy. Physical Review B, 2012, 86, .	3.2	40
12	Supplementing Ï€-systems: eumelanin and graphene-like integration towards highly conductive materials for the mammalian cell culture bio-interface. Journal of Materials Chemistry B, 2015, 3, 5070-5079.	5.8	40
13	TiO 2 /graphene-like photocatalysts for selective oxidation of 3-pyridine-methanol to vitamin B3 under UV/solar simulated radiation in aqueous solution at room conditions: The effect of morphology on catalyst performances. Applied Catalysis A: General, 2014, 487, 91-99.	4.3	39
14	Evolution of the charge density wave state in Cu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>TiSe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2012, 85, .	3.2	34
15	High-quality MgB2 thin films in situ grown by dc magnetron sputtering. Superconductor Science and Technology, 2002, 15, 1236-1239.	3.5	33
16	Pedaling time variability is increased in dropped riding position. European Journal of Applied Physiology, 2012, 112, 3161-3165.	2.5	32
17	Transport properties of a quasi-two-dimensional electron system formed inLaAlO3/EuTiO3/SrTiO3heterostructures. Physical Review B, 2014, 89, .	3.2	27
18	Graphene-like layers as promising chemiresistive sensing material for detection of alcohols at low concentration. Journal of Applied Physics, 2018, 123, .	2.5	27

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19	THz spectroscopy on graphene-like materials for bio-compatible devices. Journal of Applied Physics, 2017, 121, .	2.5	24
20	Ti- and Sr-rich surfaces of SrTiO3 studied by grazing incidence x-ray diffraction. Applied Physics Letters, 2007, 91, 101910.	3.3	22
21	Nanoscale modulation of the density of states at the conducting interface between LaAlO ₃ and SrTiO ₃ band insulators. Europhysics Letters, 2011, 93, 17004.	2.0	22
22	Photodoping and in-gap interface states across the metal-insulator transition in LaAlO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>/SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>heterostructures. Physical Review B, 2012, 86, .	3.2	22
23	Tuning the surface morphology of self-assembled graphene-like thin films through pH variation. Applied Surface Science, 2015, 353, 628-635.	6.1	21
24	Role of interband scattering in neutron irradiatedMgB2thin films by scanning tunneling spectroscopy measurements. Physical Review B, 2007, 75, .	3.2	18
25	In situ investigation of the early stage of TiO2 epitaxy on (001) SrTiO3. Journal of Chemical Physics, 2011, 135, 034705.	3.0	17
26	Symmetry breaking at the (111) interfaces of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub></m hosting a two-dimensional electron system. Physical Review B, 2018, 98, .	3.2	17
27	Selfâ€Formed, Conducting LaAlO₃/SrTiO₃ Microâ€Membranes. Advanced Functional Materials, 2020, 30, 1909964.	14.9	17
28	Large Polarons as Key Quasiparticles in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>SrTiO</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></ and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>SrTiO</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></ -Based Heterostructures. Physical Review Letters, 2020, 125, 126401.	7.8	15
29	Study of the correlation between sensing performance and surface morphology of inkjet-printed aqueous graphene-based chemiresistors for NO₂ detection. Beilstein Journal of Nanotechnology, 2017, 8, 1023-1031.	2.8	14
30	Eumelanin Graphene-Like Integration: The Impact on Physical Properties and Electrical Conductivity. Frontiers in Chemistry, 2019, 7, 121.	3.6	14
31	Neutron irradiation effects on two gaps in MgB2. Physica C: Superconductivity and Its Applications, 2007, 456, 144-152.	1.2	13
32	Orbital selective switching of ferromagnetism in an oxide quasi two-dimensional electron gas. Npj Quantum Materials, 2022, 7, .	5.2	11
33	Electronic phase separation near the superconductor-insulator transition of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Nd</mml:mtext></mml:mrow><mml:mrow><mml:mn>1</mml:m Physical Review B, 2008, 78, .	3.2	10
34	STM tunneling spectroscopic studies ofYNdxBa2â^'xCu3O7â^'Îthin films. Physical Review B, 2002, 65, .	3.2	9
35	Effect of strain in La0.7Sr0.3MnO3 epitaxial films with different crystallographic orientation. Journal of Alloys and Compounds, 2006, 423, 228-231.	5.5	9
36	Cell viability studies and operation in cellular culture medium of n-type organic field-effect transistors. Journal of Applied Physics, 2012, 111, 034702.	2.5	9

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37	Direct observation of spectroscopic inhomogeneities on La0.7Sr0.3MnO3thin films by scanning tunnelling spectroscopy. Journal of Physics Condensed Matter, 2006, 18, 8195-8204.	1.8	8
38	Shoes and Insoles: The Influence on Motor Tasks Related to Walking Gait Variability and Stability. International Journal of Environmental Research and Public Health, 2020, 17, 4569.	2.6	8
39	Superconducting properties of YNdBaCuO and NdBaCuO thin films deposited by dc sputtering. IEEE Transactions on Applied Superconductivity, 2001, 11, 3201-3204.	1.7	7
40	Check the Lambertâ€“Beerâ€“Bouguer law: a simple trick to boost the confidence of students toward both exponential laws and the discrete approach to experimental physics. European Journal of Physics, 2014, 35, 045025.	0.6	7
41	Electronic and structural reconstructions of the polar (111) SrTiO3 surface. Physical Review B, 2019, 99, .	3.2	7
42	Superconducting properties of LuNi2B2C films and junctions. Physica C: Superconductivity and Its Applications, 2000, 341-348, 757-758.	1.2	6
43	Role of hydrostatic paradoxes towards the formation of the scientific thought of students at academic level. European Journal of Physics, 2005, 26, 1017-1030.	0.6	6
44	Electric field effect and superconductingâ€“insulating transition in â€˜123â€™ cuprate superconductors. Superconductor Science and Technology, 2009, 22, 034010.	3.5	5
45	STM studies of Co_xNbSe₂and Mn_xNbSe₂. Journal of Physics: Conference Series, 2009, 150, 052073.	0.4	5
46	Two-dimensional electron gas at the (001) surface of ferromagnetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>EuTiO</mml:mi></mml:mrow><mml:mn>3< Physical Review Research, 2021, 3, .	3.6	5
47	Ferromagnetic Quasi-Two-Dimensional Electron Gas with Trigonal Crystal Field Splitting. ACS Applied Electronic Materials, 0, , .	4.3	5
48	Towards the realization of label-free biosensors through impedance spectroscopy integrated with IDES technology. European Biophysics Journal, 2012, 41, 249-256.	2.2	4
49	Effects of Gradient and Speed on Uphill Running Gait Variability. Sports Health, 2023, 15, 67-73.	2.7	4
50	HIGH QUALITY FULLY IN-SITU MgB2 THIN FILMS OBTAINED BY DC MAGNETRON SPUTTERING. International Journal of Modern Physics B, 2003, 17, 779-784.	2.0	3
51	Anisotropic transport properties in tiltedc-axis MgB2thin films. Superconductor Science and Technology, 2010, 23, 025012.	3.5	3
52	An Old but Lively Nanomaterial: Exploiting Carbon Black for the Synthesis of Advanced Materials. Eurasian Chemico-Technological Journal, 2019, 21, 203.	0.6	3
53	Comparison among superconducting models for Î²â€³-ET4[(H3O)Fe(C2O4)3]Â·C6H5Br single crystals by scanning tunnelling spectroscopy. Solid State Sciences, 2008, 10, 1773-1776.	3.2	2
54	Scanning tunnelling spectroscopy study of paramagnetic superconducting Î²â€²â€²-ET4[(H3O)Fe(C2O4)3]Â·C6H5Br crystals. Journal of Physics Condensed Matter, 2010, 22, 175701.	1.8	2

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55	Strain and electric field control of the orbital and spin order in multiferroic $$hbox {BiMnO}_3$$. European Physical Journal Plus, 2020, 135, 1.	2.6	2
56	Graphene-Like Layers from Unconventional Carbon Sources: New Perspectives on Hybrid Materials and Ï€-system Synergisms. Eurasian Chemico-Technological Journal, 2017, 18, 263.	0.6	2
57	SUPERCONDUCTING PROPERTIES OF LuNi2B2C THIN FILMS. International Journal of Modern Physics B, 2000, 14, 2743-2748.	2.0	1
58	In situ sputtering growth and characterization of MgB/sub 2/ films for microwave applications. IEEE Transactions on Applied Superconductivity, 2003, 13, 3602-3605.	1.7	1
59	Structural and Electronic Reconstructions at the LaAlO3/SrTiO3Interface (Adv. Mater. 16/2013). Advanced Materials, 2013, 25, 2332-2332.	21.0	1
60	A recovered friend: the afocal system. European Journal of Physics, 2018, 39, 025302.	0.6	1
61	Surface impedance of R1(NdxBa2â˜'x)Cu3O7â˜'Î´ (R=Nd, Y) thin films. Physica C: Superconductivity and Its Applications, 2002, 372-376, 703-705.	1.2	0
62	Scanning tunneling spectroscopy on neutron irradiated MgB2 thin films. Physica C: Superconductivity and Its Applications, 2007, 460-462, 574-575.	1.2	0
63	A teaser made simple: a didactic measurement of the spectral answer of a human-eye-calibrated lux meter. European Journal of Physics, 2012, 33, 1695-1702.	0.6	0