Ernesto Placidi

List of Publications by Year
in descending order

103 papers	1,633 citations	279798 23 h-index	377865 34 g-index
104 all docs	104 docs citations	104 times ranked	2023 citing authors

#	Article	IF	Citations
1	Facile synthesis of graphene-phthalocyanine composites as oxygen reduction electrocatalysts in microbial fuel cells. Applied Catalysis B: Environmental, 2018, 237, 699-707.	20.2	89
2	Graphene oxide nanoplatforms to enhance catalytic performance of iron phthalocyanine for oxygen reduction reaction in bioelectrochemical systems. Journal of Power Sources, 2017, 356, 381-388.	7.8	75
3	Tracing the two- to three-dimensional transition in the InAs/GaAs(001) heteroepitaxial growth. Physical Review B, 2003, 67, .	3.2	69
4	MnOx-based electrocatalysts for enhanced oxygen reduction in microbial fuel cell air cathodes. Journal of Power Sources, 2018, 390, 45-53.	7.8	64
5	Step erosion during nucleation of InAsâˆ•GaAs(001) quantum dots. Applied Physics Letters, 2005, 86, 241913.	3.3	50
6	Apparent critical thickness versus temperature for InAs quantum dot growth on GaAs(001). Applied Physics Letters, 2006, 88, 161903.	3.3	49
7	Carbon-supported Fe/Mn-based perovskite-type oxides boost oxygen reduction in bioelectrochemical systems. Carbon, 2019, 145, 716-724.	10.3	47
8	Kinetic aspects of the morphology of self-assembled InAs quantum dots on GaAs(001). Applied Physics Letters, 2001, 78, 320-322.	3.3	40
9	How kinetics drives the two- to three-dimensional transition in semiconductor strained heterostructures: The case of InAsâˆ•GaAs(001). Applied Physics Letters, 2006, 89, 041904.	3.3	37
10	The transition from 3C SiC(111) to graphene captured by Ultra High Vacuum Scanning Tunneling Microscopy. Carbon, 2015, 91, 378-385.	10.3	36
11	A redox stable Pd-doped perovskite for SOFC applications. Journal of Materials Chemistry A, 2019, 7, 5344-5352.	10.3	33
12	Environmentally Friendly Graphene Inks for Touch Screen Sensors. Advanced Functional Materials, 2021, 31, 2103287.	14.9	33
13	Temperature dependence of the size distribution function of InAs quantum dots on GaAs(001). Physical Review B, 2010, 81, .	3.2	32
14	Fibrils or Globules? Tuning the Morphology of Peptide Aggregates from Helical Building Blocks. Journal of Physical Chemistry B, 2013, 117, 5448-5459.	2.6	32
15	Self-assembly of InAs and Si/Ge quantum dots on structured surfaces. Journal of Physics Condensed Matter, 2004, 16, S1503-S1534.	1.8	31
16	InAs/GaAs(001) epitaxy: kinetic effects in the two-dimensional to three-dimensional transition. Journal of Physics Condensed Matter, 2007, 19, 225006.	1.8	31
17	Graphene ripples generated by grain boundaries in highly ordered pyrolytic graphite. Carbon, 2014, 68, 330-336.	10.3	31
18	Morphological instabilities of the InAs/GaAs(001) interface and their effect on the self-assembling of InAs quantum-dot arrays. Applied Physics Letters, 2002, 81, 2270-2272.	3.3	29

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19	Sudden nucleation versus scale invariance of InAs quantum dots on GaAs. Physical Review B, 2007, 75, .	3.2	29
20	Discriminating between Different Heavy Metal Ions with Fullerene-Derived Nanoparticles. Sensors, 2018, 18, 1496.	3.8	29
21	Reflection high energy electron diffraction observation of surface mass transport at the two- to three-dimensional growth transition of InAs on GaAs(001). Applied Physics Letters, 2005, 87, 252101.	3.3	27
22	Graphene Oxide Oxygen Content Affects Physical and Biological Properties of Scaffolds Based on Chitosan/Graphene Oxide Conjugates. Materials, 2019, 12, 1142.	2.9	26
23	Self-Assembly of a Designed Amyloid Peptide Containing the Functional Thienylalanine Unit. Journal of Physical Chemistry B, 2010, 114, 10674-10683.	2.6	24
24	Self-Assembly of a Model Peptide Incorporating a Hexa-Histidine Sequence Attached to an Oligo-Alanine Sequence, and Binding to Gold NTA/Nickel Nanoparticles. Biomacromolecules, 2014, 15, 3412-3420.	5.4	24
25	Influence of surface crystal-orientation on transfer doping of V2O5/H-terminated diamond. Applied Physics Letters, 2018, 112, 181602.	3.3	23
26	Surface versus bulk contributions from reflectance anisotropy and electron energy loss spectra of theGaAs(001)â"c(4Ã—4)surface. Physical Review B, 2003, 68, .	3.2	22
27	Chemically prepared well-ordered InP(001) surfaces. Surface Science, 2006, 600, 3160-3166.	1.9	22
28	Remote Electronic Control of DNA-Based Reactions and Nanostructure Assembly. Nano Letters, 2018, 18, 2918-2923.	9.1	22
29	Annealing effects on faceting of InAsâˆ•GaAs(001) quantum dots. Applied Physics Letters, 2009, 94, 021901.	3.3	21
30	Biomedical NiTi and Î²-Ti Alloys: From Composition, Microstructure and Thermo-Mechanics to Application. Metals, 2022, 12, 406.	2.3	21
31	A single-residue substitution inhibits fibrillization of Ala-based pentapeptides. A spectroscopic and molecular dynamics investigation. Soft Matter, 2014, 10, 2508.	2.7	20
32	Textured Sb2Te3 films and GeTe/Sb2Te3 superlattices grown on amorphous substrates by molecular beam epitaxy. AIP Advances, 2017, 7, .	1.3	20
33	Surface states at theGaAs(001)2Ã—4surface. Physical Review B, 2004, 69, .	3.2	19
34	Geometric structure and optical properties of theGaAs(001)â"c(4Ã—4)surface. Physical Review B, 2005, 71, .	3.2	19
35	The effect of Î²-sheet breaker peptides on metal associated Amyloid-Î² peptide aggregation process. Biophysical Chemistry, 2017, 229, 110-114.	2.8	19
36	Scaling law and dynamical exponent in the Volmerâ€"Weber growth mode: silver on GaAs(001)2Ã—4. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 69-70, 243-246.	3.5	18

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37	Well-ordered (100) InAs surfaces using wet chemical treatments. Surface Science, 2004, 570, 237-244.	1.9	17
38	Influence of patterning on the nucleation of Ge islands on Si and SiO2 surfaces. Surface Science, 2007, 601, 2778-2782.	1.9	17
39	Aggregation propensity of Aib homoâ€peptides of different length: an insight from molecular dynamics simulations. Journal of Peptide Science, 2014, 20, 494-507.	1.4	16
40	Role of dietary antioxidant (â˜)-epicatechin in the development of Î²-lactoglobulin fibrils. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 766-772.	2.3	16
41	Liposome-Templated Hydrogel Nanoparticles as Vehicles for Enzyme-Based Therapies. Langmuir, 2015, 31, 7572-7580.	3.5	15
42	Interactions between Primary Neurons and Graphene Films with Different Structure and Electrical Conductivity. Advanced Functional Materials, 2021, 31, 2005300.	14.9	15
43	The Unexpected Role of Arsenic in Driving the Selective Growth of InAs Quantum Dots on GaAs. ACS Nano, 2013, 7, 3868-3875.	14.6	14
44	Tailoring active sites of iron-nitrogen-carbon catalysts for oxygen reduction in alkaline environment: Effect of nitrogen-based organic precursor and pyrolysis atmosphere. Electrochimica Acta, 2021, 391, 138899.	5.2	14
45	A spectroscopic and molecular dynamics study on the aggregation process of a long-acting lipidated therapeutic peptide: the case of semaglutide. Soft Matter, 2020, 16, 10122-10131.	2.7	13
46	The GaAs()-c(4Ã—4) surface: a new perspective from energy loss spectra. Surface Science, 2003, 524, L71-L76.	1.9	12
47	Manipulating surface diffusion and elastic interactions to obtain quantum dot multilayer arrangements over different length scales. Applied Physics Letters, 2014, 105, .	3.3	12
48	Towards free-standing graphane: atomic hydrogen and deuterium bonding to nano-porous graphene. Nanotechnology, 2021, 32, 035707.	2.6	12
49	Valence band and In-4d core level photoemission study of de-capped and ion-bombarded-annealed InAs(001) epitaxial surfaces. Surface Science, 2005, 576, 123-130.	1.9	11
50	Hierarchical transfer of chiral information from the molecular to the mesoscopic scale by Langmuirâ€“Blodgett deposition of tetrasteroid-porphyrins. New Journal of Chemistry, 2017, 41, 639-649.	2.8	11
51	Single quantum dot emission by nanoscale selective growth of InAs on GaAs: A bottom-up approach. Applied Physics Letters, 2008, 93, 231904.	3.3	10
52	Complex domain-wall dynamics in compressively strained<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ga</mml:mtext></mml:mrow><mml:mrow><mml:mn>1</mml:m Physical Review B, 2008, 78, .	3.2	10
53	Coarsening effect on island-size scaling: The model case InAs/GaAs(001). Physical Review E, 2012, 86, 061605.	2.1	10
54	Tuning the Morphology of Nanostructured Peptide Films by the Introduction of a Secondary Structure Conformational Constraint: A Case Study of Hierarchical Self-Assembly. Journal of Physical Chemistry B, 2018, 122, 6305-6313.	2.6	10

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55	Tailoring morphology and structure of manganese oxide nanomaterials to enhance oxygen reduction in microbial fuel cells. Synthetic Metals, 2020, 268, 116487.	3.9	10
56	Effects of the annealing of amorphous Ta2O5 coatings produced by ion beam sputtering concerning the effusion of argon and the chemical composition. Journal of Non-Crystalline Solids, 2021, 557, 120651.	3.1	10
57	Anisotropy of the GaAs(001)-Î²2(2Ã—4) surface from high-resolution electron energy loss spectroscopy. Physical Review B, 2003, 67, .	3.2	9
58	Kinetically driven selective growth of InAs quantum dots on GaAs. Journal of Materials Research, 2013, 28, 3201-3209.	2.6	9
59	Increasing Optical Efficiency in the Telecommunication Bands of Strain-Engineered Ga(As,Bi) Alloys. Physical Review Applied, 2020, 14, .	3.8	9
60	Gap Opening in Double-Sided Highly Hydrogenated Free-Standing Graphene. Nano Letters, 2022, 22, 2971-2977.	9.1	9
61	Dynamic behavior of silver islands growing on GaAs(001)2Ã—4 substrate. Surface Science, 2000, 445, L17-L22.	1.9	8
62	Human insulin fibrillogenesis in the presence of epigallocatechin gallate and melatonin: Structural insights from a biophysical approach. International Journal of Biological Macromolecules, 2018, 115, 1157-1164.	7.5	8
63	Adsorption of molecular oxygen on GaAs(001) studied using high-resolution electron energy-loss spectroscopy. Physical Review B, 2006, 73, .	3.2	7
64	Temperature-dependent NÃ©el wall dynamics in GaMnAs/GaAs. New Journal of Physics, 2010, 12, 093022.	2.9	7
65	Comparative study of low temperature growth of InAs and InMnAs quantum dots. Nanotechnology, 2011, 22, 195602.	2.6	6
66	The role of kinetics on the Mn-induced reconstructions of the GaAs(001) surface. Journal of Applied Physics, 2011, 109, .	2.5	6
67	Scaling behavior of GaAs and GaMnAs quantum rings grown by droplet epitaxy. Applied Physics Letters, 2012, 101, 141901.	3.3	6
68	Growth, Electronic and Electrical Characterization of Ge-Rich Geâ€“Sbâ€“Te Alloy. Nanomaterials, 2022, 12, 1340.	4.1	6
69	DPPTE Thiolipid Self-Assembled Monolayer: A Critical Assay. Langmuir, 2016, 32, 11560-11572.	3.5	5
70	Controlling the Formation of Peptide Films: Fully Developed Helical Peptides are Required to Obtain a Homogenous Coating over a Large Area. ChemPlusChem, 2019, 84, 1688-1696.	2.8	5
71	Ultrasound-Stimulated PVA Microbubbles for Adhesive Removal from Cellulose-Based Materials: A Groundbreaking Low-Impact Methodology. ACS Applied Materials & Interfaces, 2021, 13, 24207-24217.	8.0	5
72	Electronic properties of GaAsBi(001) alloys at low Bi content. Physical Review Materials, 2019, 3, .	2.4	5

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73	Reflectance anisotropy spectroscopy of strain-engineered GaAsBi alloys. Applied Physics Letters, 2022, 120, .	3.3	5
74	Argon and Other Defects in Amorphous SiO2 Coatings for Gravitational-Wave Detectors. Coatings, 2022, 12, 1001.	2.6	5
75	XPS and STM study of Mn incorporation on the GaAs(001) surface. Superlattices and Microstructures, 2009, 46, 258-265.	3.1	4
76	In-line correlation and ordering of InAs/GaAs multistacked Quantum Dots structures. Journal of Crystal Growth, 2015, 419, 138-142.	1.5	4
77	Tuning the morphology of mesoscopic structures of porphyrin macrocycles functionalized by an antimicrobial peptide. Journal of Porphyrins and Phthalocyanines, 2020, 24, 920-928.	0.8	4
78	Interface Formation during the Growth of Phase Change Material Heterostructures Based on Ge-Rich Ge-Sb-Te Alloys. Nanomaterials, 2022, 12, 1007.	4.1	4
79	Selective growth of InAs quantum dots on SiO₂-masked GaAs. Journal of Nanophotonics, 2009, 3, 031995.	1.0	3
80	Single QD emission from arrays of QD chains obtained by patterning-free method. International Journal of Higher Education Management, 2015, 1, 33-37.	1.3	3
81	Stress-determined nucleation sites above GaAs-capped arrays of InAs quantum dots. Journal of Applied Physics, 2016, 120, 125704.	2.5	3
82	The InAs/GaAs(001) Quantum Dots Transition: Advances on Understanding. , 2008, , 1-23.		3
83	InAs Epitaxy on GaAs(001): A Model Case of Strain-Driven Self-assembling of Quantum Dots. , 2012, , 73-125.		3
84	Magnetic aftereffect in compressively strained GaMnAs studied using Kerr microscopy. Physical Review B, 2010, 81, .	3.2	2
85	Double grain boundary configurations on graphite surfaces. Carbon, 2020, 170, 630-635.	10.3	2
86	Aggregation properties of a therapeutic peptide for rheumatoid arthritis: A spectroscopic and molecular dynamics study. ChemPhysMater, 2021, 1, 62-62.	2.8	2
87	Magnetoelectric properties of oxygenated (Ga,Mn)As. Physical Review B, 2011, 83, .	3.2	1
88	Magnetism and carrier modulation in (Ga,Mn)As/organic-dye hybrid devices. Applied Physics Letters, 2011, 98, 022503.	3.3	1
89	Selective growth of InAs quantum dots on GaAs driven by as kinetics. Crystal Research and Technology, 2014, 49, 546-551.	1.3	1
90	Anisotropic cation diffusion in the GaAs capping of InAs/GaAs(001) quantum dots. Journal of Applied Physics, 2016, 120, 235303.	2.5	1

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91	2D Voronoi tessellation generated by lines and belts of dots. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 516-519.	2.1	1
92	Tuning the growth for a selective nucleation of chains of Quantum Dots behaving as single photon emitters. Journal of Crystal Growth, 2017, 457, 177-183.	1.5	1
93	Two-dimensional antiferromagnetic ordering of the Mn/GaAs(001) interface. Physical Review B, 2019, 99, .	3.2	1
94	Formulation matters! A spectroscopic and molecular dynamics investigation on the peptide CIGB552 as itself and in its therapeutical formulation. Journal of Peptide Science, 2022, 28, e3356.	1.4	1
95	Morphology of Self-Assembled InAs Quantum Dots on GaAs(001). Materials Research Society Symposia Proceedings, 2001, 696, 1.	0.1	0
96	Morphology of Self-Assembled InAs Quantum Dots on GaAs(001).. Materials Research Society Symposia Proceedings, 2001, 707, 671.	0.1	0
97	Structural study of the InAs quantum-dot nucleation on GaAs(001). Microelectronics Journal, 2003, 34, 419-422.	2.0	0
98	Electronic anisotropy of the GaAs(001) surface studied by energy loss spectroscopy. Microelectronics Journal, 2003, 34, 595-597.	2.0	0
99	The Influence of the Wetting Layer Morphology on the Nucleation and the Evolution of InAs/GaAs (001) Quantum Dots. Semiconductor Conference, 2009 CAS 2009 International, 2007, , .	0.0	0
100	Optical techniques for pump-probe magnetic measurements and nanoimaging of biological samples. Rendiconti Lincei, 2011, 22, 49-57.	2.2	0
101	Role of As in the Anisotropic Positioning of Self-Assembled InAs Quantum Dots. Materials Research Society Symposia Proceedings, 2013, 1551, 3-9.	0.1	0
102	Neuronal Networks: Interactions between Primary Neurons and Graphene Films with Different Structure and Electrical Conductivity (Adv. Funct. Mater. 11/2021). Advanced Functional Materials, 2021, 31, 2170075.	14.9	0
103	Strain-Engineered Arrays of InAs Quantum Dots on GaAs(001): Epitaxial Growth and Modeling. Nanoscience and Nanotechnology Letters, 2017, 9, 1083-1094.	0.4	0