Roberto Verucchi

List of Publications by Year
in descending order

77	1,239	331670 21	434195 31
papers	citations	h-index	g-index

78	78	78	1857
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Spectrophotometric method for optical band gap and electronic transitions determination of semiconductor materials. Optical Materials, 2017, 64, 18-25.	3.6	109
2	Electron Capture and Loss Processes in the Interaction of Hydrogen, Oxygen, and Fluorine Atoms and Negative Ions with a MgO(100) Surface. Physical Review Letters, 1997, 79, 3526-3529.	7.8	63
3	Super-activated biochar from poultry litter for high-performance supercapacitors. Microporous and Mesoporous Materials, 2019, 285, 161-169.	4.4	58
4	Graphene oxide prepared by graphene nanoplatelets and reduced by laser treatment. Nanotechnology, 2017, 28, 224002.	2.6	53
5	Electronic properties of CuPc and H2Pc: an experimental and theoretical study. Physical Chemistry Chemical Physics, 2013, 15, 12864.	2.8	51
6	Enhancement of the core near-band-edge emission induced by an amorphous shell in coaxial one-dimensional nanostructure: the case of SiC/SiO₂core/shell self-organized nanowires. Nanotechnology, 2010, 21, 345702.	2.6	37
7	In situ decoration of laser-scribed graphene with TiO2 nanoparticles for scalable high-performance micro-supercapacitors. Carbon, 2021, 176, 296-306.	10.3	37
8	Boosting and Balancing Electron and Hole Mobility in Single- and Bilayer WSe₂ Devices via Tailored Molecular Functionalization. ACS Nano, 2019, 13, 11613-11622.	14.6	34
9	Morphological and optical properties of titanyl phthalocyanine films deposited by supersonic molecular beam epitaxy (SuMBE). Surface Science, 2004, 573, 346-358.	1.9	33
10	Optimization of a buffer layer for cubic silicon carbide growth on silicon substrates. Journal of Crystal Growth, 2013, 383, 84-94.	1.5	32
11	Synthesis of single layer graphene on Cu(111) by C₆₀ supersonic molecular beam epitaxy. RSC Advances, 2016, 6, 37982-37993.	3.6	31
12	2D-MoS2 goes 3D: transferring optoelectronic properties of 2D MoS2 to a large-area thin film. Npj 2D Materials and Applications, 2021, 5, .	7.9	31
13	Epitaxy of Nanocrystalline Silicon Carbide on Si(111) at Room Temperature. Journal of the American Chemical Society, 2012, 134, 17400-17403.	13.7	30
14	Tracking the Hydrogen Motion in Defective Graphene. Journal of Physical Chemistry C, 2014, 118, 7110-7116.	3.1	26
15	Logic with memory: and gates made of organic and inorganic memristive devices. Semiconductor Science and Technology, 2014, 29, 104009.	2.0	25
16	Triode electron bombardment evaporation source for ultrahigh vacuum thin film deposition. Review of Scientific Instruments, 2000, 71, 3444-3450.	1.3	24
17	Titanium dioxide thin films prepared by seeded supersonic beams for gas sensing applications. Sensors and Actuators B: Chemical, 2004, 100, 177-184.	7.8	24
18	Tetraphenylporphyrin electronic properties: a combined theoretical and experimental study of thin films deposited by SuMBD. Physical Chemistry Chemical Physics, 2010, 12, 871-880.	2.8	24

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19	The development of solâ€“gel derived TiO₂ thin films and corresponding memristor architectures. RSC Advances, 2017, 7, 1654-1663.	3.6	24
20	Electronic properties of tetrakis(pentafluorophenyl)porphyrin. New Journal of Chemistry, 2013, 37, 1036.	2.8	23
21	Growth of Fe ultrathin films on Ni(111): structure and electronic properties. Surface Science, 2000, 454-456, 692-696.	1.9	22
22	Versatile and Scalable Strategy To Grow Solâ€“Gel Derived 2H-MoS₂ Thin Films with Superior Electronic Properties: A Memristive Case. ACS Applied Materials & Interfaces, 2018, 10, 34392-34400.	8.0	22
23	Synthesis of SiC on Si(111) at moderate temperatures by supersonic C60 beams. Applied Surface Science, 2001, 184, 350-355.	6.1	21
24	Thermal-induced hydrophilicity enhancement of titanium dental implant surfaces. Journal of Oral Science, 2020, 62, 217-221.	1.7	19
25	Tailoring Superconductivity in Large-Area Single-Layer NbSe₂ via Self-Assembled Molecular Adlayers. Nano Letters, 2021, 21, 136-143.	9.1	19
26	Asymmetric supercapacitors based on nickel decorated graphene and porous graphene electrodes. Electrochimica Acta, 2022, 424, 140626.	5.2	19
27	Activation and control of organolanthanide synthesis by supersonic molecular beams: Erbium-porphyrin test case. Physical Review B, 2009, 79, .	3.2	18
28	High mobility n-type organic thin-film transistors deposited at room temperature by supersonic molecular beam deposition. Applied Physics Letters, 2014, 104, .	3.3	18
29	Fabrication of a sensitive colorimetric nanosensor for determination of cysteine in human serum and urine samples based on magnetic-sulfur, nitrogen graphene quantum dots as a selective platform and Au nanoparticles. Talanta, 2021, 226, 122055.	5.5	17
30	Carbon-doped SiO_xnanowires with a large yield of white emission. Nanotechnology, 2014, 25, 185704.	2.6	16
31	Electron capture on surfaces with electronegative adsorbates and surface poisoning. Surface Science, 1998, 397, 361-373.	1.9	15
32	Interfacing aptamers, nanoparticles and graphene in a hierarchical structure for highly selective detection of biomolecules in OECT devices. Scientific Reports, 2021, 11, 9380.	3.3	15
33	Oxidation of Mg and electron transfer processes. Surface Science, 1997, 380, L521-L526.	1.9	12
34	Surface doping in T6/PDI-8CN2 heterostructures investigated by transport and photoemission measurements. Applied Physics Letters, 2012, 101, .	3.3	12
35	Non-adiabatic ab initio molecular dynamics of supersonic beam epitaxy of silicon carbide at room temperature. Journal of Chemical Physics, 2013, 138, 044701.	3.0	12
36	Functionalization of SiC/SiO_x nanowires with a porphyrin derivative: a hybrid nanosystem for X-ray induced singlet oxygen generation. Molecular Systems Design and Engineering, 2017, 2, 165-172.	3.4	11

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37	Flexible Conductors from Brown Algae for Green Electronics. Advanced Sustainable Systems, 2019, 3, 1900001.	5.3	11
38	XAS of tetrakis(phenyl)- and tetrakis(pentafluorophenyl)-porphyrin: an experimental and theoretical study. Physical Chemistry Chemical Physics, 2015, 17, 2001-2011.	2.8	10
39	Photophysics of Pentacene-Doped Picene Thin Films. Journal of Physical Chemistry C, 2018, 122, 16879-16886.	3.1	10
40	Sensing of halogenated aromatic hydrocarbons in water with a cavitand coated piezoelectric device. Sensors and Actuators B: Chemical, 2018, 276, 340-348.	7.8	10
41	Structural Characterizations of Palladium Clusters Prepared by Polyol Reduction of [PdCl₄]^{2â^'}Ions. Journal of Analytical Methods in Chemistry, 2016, 2016, 1-6.	1.6	9
42	Primary cortical neurons on PMCS TiO 2 films towards bio-hybrid memristive device: A morpho-functional study. Biophysical Chemistry, 2017, 229, 115-122.	2.8	9
43	Local effects in electron capture processes of fluorine atoms interacting with an oxidised Mg surface. Europhysics Letters, 1997, 40, 329-336.	2.0	8
44	Prototyping a memristive-based device to analyze neuronal excitability. Biophysical Chemistry, 2019, 253, 106212.	2.8	8
45	Osteoblast adhesion and response mediated by terminal â€“SH group charge surface of SiOxCy nanowires. Journal of Materials Science: Materials in Medicine, 2019, 30, 43.	3.6	8
46	Platinum carbonyl clusters decomposition on defective graphene surface. Surface Science, 2020, 691, 121499.	1.9	8
47	Detection of Nitroaromatic Explosives in Air by Amino-Functionalized Carbon Nanotubes. Nanomaterials, 2022, 12, 1278.	4.1	8
48	Ion Beam-Stimulated Auger Electron Emission from Cr and Cr-Silicides. Physica Scripta, 1992, T41, 246-250.	2.5	7
49	Ar+-induced silicon Auger spectra: a probe for the sputter-related collisional and emission processes. Nuclear Instruments & Methods in Physics Research B, 1991, 59-60, 37-40.	1.4	6
50	Substrate amorphization induced by the sputter deposition process: Geometrical aspects. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 394-399.	2.1	6
51	SiC(1 0 0) ordered film growth by C60 decomposition on Si(1 0 0) surfaces. Applied Surface Science, 2001, 184, 50-54.	6.1	6
52	SiC film growth on Si(111) by supersonic beams of C 60. European Physical Journal B, 2002, 26, 509-514.	1.5	6
53	Excitonic recombination in superstoichiometric nanocrystalline TiO2 grown by cluster precursors at room temperature. Physical Chemistry Chemical Physics, 2012, 14, 5705.	2.8	6
54	3D reconstruction of pentacene structural organization in top-contact OTFTs via resonant soft X-ray reflectivity. Applied Physics Letters, 2018, 112, .	3.3	6

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55	Growth and functionalization of carbon nanotubes for nitroaromatic explosive detection. Materials Today: Proceedings, 2020, 20, 46-49.	1.8	6
56	Fullerene freejets-based synthesis of silicon carbide: heteroepitaxial growth on Si(111) at low temperatures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 101, 169-173.	3.5	5
57	The Interaction of C60 on Si(111) 7Ã¢â‚¬Ã—â€”Ã¢â‚¬7 Studied by Supersonic Molecular Beams: Interplay between Precursor Kinetic Energy and Substrate Temperature in Surface Activated Processes. Frontiers in Materials, 2015, 2, .	2.4	5
58	A novel combined experimental and multiscale theoretical approach to unravel the structure of SiC/SiO_x core/shell nanowires for their optimal design. Nanoscale, 2018, 10, 13449-13461.	5.6	5
59	EXAFS analysis of ultrathin Fe films grown on Ni(100). Surface Science, 2001, 487, 258-266.	1.9	4
60	Optimization of synthesis protocols to control the nanostructure and the morphology of metal oxide thin films for memristive applications. AIP Conference Proceedings, 2015, , .	0.4	4
61	Synthesis of MoS2 Thin Film by Ionized Jet Deposition: Role of Substrate and Working Parameters. Surfaces, 2020, 3, 683-693.	2.3	4
62	Unravelling Work Function Contributions and Their Engineering in 2H-MoS₂ Single Crystal Discovered by Molecular Probe Interaction. Journal of Physical Chemistry C, 2020, 124, 6732-6740.	3.1	4
63	Titanium-doped hydroxyapatites photoanodes for Dye-Sensitized Solar Cells. Ceramics International, 2021, 47, 9701-9710.	4.8	4
64	Surface sensitivity of ion-induced Auger electron emission (IAE) spectroscopy. Surface Science, 1995, 331-333, 1256-1261.	1.9	3
65	Ion bombardment influence on the Cr Auger autoionization structure. Solid State Communications, 1993, 86, 695-698.	1.9	2
66	Interface magnetometry in a (Fe6Ã…/Ni24Ã…)10 multilayer. Applied Surface Science, 2001, 175-176, 281-287.	6.1	2
67	CIGS-Based Flexible Solar Cells. , 2019, , 365-382.		2
68	Doubling the Mechanical Properties of Spider Silk by C60 Supersonic Molecular Beam Epitaxy. Frontiers in Materials, 2020, 7, .	2.4	2
69	Effect of the incidence geometry on the ion induced Ni-silicides surface compositional modifications. Nuclear Instruments & Methods in Physics Research B, 1993, 80-81, 877-880.	1.4	1
70	Ex-situ XPS-investigation of the interface between PE-CVD SiO2 and wet chemically etched MO-CVD epitaxial layers of In0.53Ga0.47As. Fresenius' Journal of Analytical Chemistry, 1995, 353, 647-654.	1.5	1
71	Auger emission by impact of energetic atoms on Si monolayer(s). Surface Science, 1996, 365, 517-524.	1.9	1
72	PLVVandLMMAuger emission induced byAr+impact on the InP(110) surface. Physical Review B, 1997, 56, 15272-15276.	3.2	1

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73	Deposition from Supersonic Beams (SuMBE): a Kinetic Approach for Controlling Thin Film Properties. AIP Conference Proceedings, 2005, , .	0.4	1
74	Emission Enhancement of SiC/SiO₂ Core/Shell Nanowires Induced by the Oxide Shell. Materials Science Forum, 2012, 717-720, 557-560.	0.3	1
75	Synthesis of palladium clusters by reduction of K2PdCl4 with ethylene glycol. , 2015, , .		1
76	Particle-induced Auger emission from Si monolayers. Surface Science, 1996, 352-354, 719-723.	1.9	0
77	Merging the Solâ€“Gel Technique with the Pulsed Microplasma Cluster Source Deposition to Improve Control over the Memristive Response of TiO2 Thin Films. Coatings, 2021, 11, 348.	2.6	0