Raffaele Giuseppe Agostino

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4871832/publications.pdf

Version: 2024-02-01

115 papers 2,507 citations

201385 27 h-index 233125 45 g-index

117 all docs

117 docs citations

117 times ranked

2907 citing authors

#	Article	IF	Citations
1	Texture control of PbTiO3 and Pb(Zr,Ti)O3 thin films with TiO2 seeding. Journal of Applied Physics, 1998, 83, 3835-3841.	1.1	266
2	Raman Investigation of the Ionic Liquid N-Methyl-N-propylpyrrolidinium Bis(trifluoromethanesulfonyl)imide and Its Mixture with LiN(SO2CF3)2. Journal of Physical Chemistry A, 2005, 109, 92-96.	1.1	196
3	Orientation of AdsorbedC60Molecules Determined via X-Ray Photoelectron Diffraction. Physical Review Letters, 1996, 76, 4733-4736.	2.9	110
4	Cu-BTC/Aminated Graphite Oxide Composites As High-Efficiency CO ₂ Capture Media. ACS Applied Materials & Diterfaces, 2014, 6, 101-108.	4.0	89
5	Higher methane storage at low pressure and room temperature in new easily scalable large-scale production activated carbon for static and vehicular applications. Fuel, 2013, 104, 813-821.	3.4	86
6	Surface electronic and structural properties of nanostructured titanium oxide grown by pulsed laser deposition. Surface Science, 2011, 605, 333-340.	0.8	62
7	Local structure of c($2\tilde{A}$ —2)-Na on Al(001): Experimental evidence for the coexistence of intermixing and on-surface adsorption. Physical Review B, 1994, 50, 14516-14524.	1.1	59
8	Volumetric apparatus for hydrogen adsorption and diffusion measurements: Sources of systematic error and impact of their experimental resolutions. Review of Scientific Instruments, 2013, 84, 103907.	0.6	56
9	Catanionic Tubules with Tunable Charge. Angewandte Chemie - International Edition, 2010, 49, 6604-6607.	7.2	55
10	Methane storage in zeolite-like carbon materials. Microporous and Mesoporous Materials, 2014, 188, 16-22.	2.2	55
11	Time-of-Flight Neutron Imaging on IMAT@ISIS: A New User Facility for Materials Science. Journal of Imaging, 2018, 4, 47.	1.7	50
12	Posidonia Oceanica and Wood chips activated carbon as interesting materials for hydrogen storage. International Journal of Hydrogen Energy, 2020, 45, 14038-14047.	3.8	48
13	X-ray photoelectron and Auger electron diffraction study of diamond and graphite surfaces. Surface Science, 1994, 312, 131-142.	0.8	47
14	Modelling of adsorption of textile dyes over multi-walled carbon nanotubes: Equilibrium and kinetic. Chinese Journal of Chemical Engineering, 2017, 25, 523-532.	1.7	42
15	Characterization of PEO-lithium triflate polymer electrolytes: Conductivity, DSC and Raman Investigations. Ionics, 2002, 8, 36-43.	1.2	36
16	Plasmon of Shockley surface states in Cu(111): A high-resolution electron energy loss spectroscopy study. Physical Review B, 2006, 74, .	1.1	36
17	Unusual molecular orientation and frozen librational motion of C60on Cu(110). Physical Review B, 1999, 60, 4517-4520.	1.1	35
18	A spectro-microscopic investigation of Fe–Co bimetallic catalysts supported on MgO for the production of thin carbon nanotubes. Carbon, 2010, 48, 3434-3445.	5.4	35

#	Article	IF	CITATIONS
19	Preparation of foamed and unfoamed geopolymer/NaX zeolite/activated carbon composites for CO2 adsorption. Journal of Cleaner Production, 2022, 330, 129843.	4.6	34
20	Purely quadratic dispersion of surface plasmon in Ag/Ni(111): the influence of electron confinement. Physica Status Solidi - Rapid Research Letters, 2008, 2, 86-88.	1.2	33
21	High resolution electron energy loss measurements of Na∕Cu(111) and H2O∕Na∕Cu(111): Dependence of water reactivity as a function of Na coverage. Journal of Chemical Physics, 2007, 126, 244712.	1.2	32
22	Influence of CO adsorption on the alkali-substrate bond studied by high-resolution electron energy loss spectroscopy. Physical Review B, 2007, 76, .	1.1	30
23	Electronic structure of cluster assembled nanostructured TiO2 by resonant photoemission at the Ti L2,3 edge. Journal of Chemical Physics, 2008, 128, 094704.	1.2	30
24	Assessment of activated carbon fibers from commercial Kevlar \hat{A}^{\otimes} as nanostructured material for gas storage: Effect of activation procedure and adsorption of CO2 and CH4. Journal of Analytical and Applied Pyrolysis, 2020, 152, 104974.	2.6	29
25	Surface atomic structure of c($2\tilde{A}$ —2)-Si on Cu(110). Physical Review B, 1997, 55, 12896-12898.	1.1	28
26	Shortâ€Range Interactions in Na Coadsorption with CO and O on Ni(111). ChemPhysChem, 2008, 9, 1189-1194.	1.0	28
27	Reduced methanol crossover and enhanced proton transport in nanocomposite membranes based on clayâ°'CNTs hybrid materials for direct methanol fuel cells. lonics, 2017, 23, 2113-2123.	1.2	28
28	Angle-scanned photoemission: Fermi surface mapping and structural determination. Surface Science, 1998, 402-404, 614-622.	0.8	27
29	Electronic properties of self-assembled quantum dots of sodium on $Cu(111)$ and their interaction with water. Surface Science, 2007, 601, 2656-2659.	0.8	27
30	Liquid-like hydrogen in the micropores of commercial activated carbons. International Journal of Hydrogen Energy, 2015, 40, 14562-14572.	3.8	27
31	Virtual unrolling and deciphering of Herculaneum papyri by X-ray phase-contrast tomography. Scientific Reports, 2016, 6, 27227.	1.6	27
32	Thermal annealing and hydrogen exposure effects on cluster-assembled nanostructured carbon films embedded with transition metal nanoparticles. Physical Review B, 2003, 68, .	1.1	24
33	Collective Excitations in Nanoscale Thin Alkali Films: Na/Cu(111). Journal of Nanoscience and Nanotechnology, 2009, 9, 3932-3937.	0.9	24
34	Thermally induced evolution of sol–gel grown WO3 films on ITO/glass substrates. Applied Surface Science, 2014, 297, 195-204.	3.1	21
35	Pinecone-Derived Activated Carbons as an Effective Medium for Hydrogen Storage. Energies, 2020, 13, 2237.	1.6	21
36	Assessment of commercial poly($\hat{l}\mu$ -caprolactone) as a renewable candidate for carbon capture and utilization. Journal of CO2 Utilization, 2017, 19, 185-193.	3.3	20

#	Article	IF	Citations
37	Nature of the Alkali Surface Bond at Low Coverages Investigated by Vibrational Measurements. Journal of Physical Chemistry C, 2008, 112, 6977-6980.	1.5	19
38	Characterization of graphene grown on copper foil by chemical vapor deposition (<scp>CVD</scp>) at ambient pressure conditions. Journal of Raman Spectroscopy, 2018, 49, 1006-1014.	1.2	19
39	Evidences of alkali-induced softening of the oxygen-substrate bond. Journal of Chemical Physics, 2008, 128, 074703.	1.2	18
40	Hydrogen storage performances for mesoporous silica synthesized with mixed tetraethoxysilane and methyltriethoxysilane precursors in acidic condition. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 601, 125040.	2.3	18
41	Hydrogen storage in ordered and disordered phenylene-bridged mesoporous organosilicas. International Journal of Hydrogen Energy, 2014, 39, 2104-2114.	3.8	17
42	On the Interpretation of the Fine Structure Below and Above the Cu-M23VVAuger Line. Physica Scripta, 1992, T41, 149-152.	1.2	16
43	X-ray photoelectron diffraction study of CO- and NO-saturated Ni(111). Surface Science, 1993, 282, 62-66.	0.8	16
44	Local heteroepitaxy of diamond on silicon (100):mA study of the interface structure. Physical Review B, 1997, 55, 15895-15904.	1.1	16
45	Co-adsorption of oxygen and carbon monoxide on Ni(111). Surface Science, 2003, 536, 33-44.	0.8	16
46	Electronic structure of high- and low- temperature ($2\tilde{A}$ – 2)-Na/Al(001) phases from angle-scanned ultraviolet photoemission. Physical Review B, 1996, 54, 5893-5900.	1.1	15
47	Vibrational and electronic properties of hydrogen adsorbed on single-wall carbon nanotubes. Physical Review B, 2004, 69, .	1.1	15
48	Resistance to the transport of H2 through the external surface of as-made and modified silicalite-1 (MFI). Microporous and Mesoporous Materials, 2016, 220, 290-297.	2.2	15
49	CO adsorption on Ni(100): Evidences for a weakly bound phase by HREELS measurements. Surface Science, 2006, 600, 1456-1461.	0.8	14
50	Low Pressure Methane Storage in Pinecone-Derived Activated Carbons. Energy & Energy	2.5	14
51	Mass and energy selected ion beam for deposition and ion induced surface modifications. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 2848-2855.	0.9	13
52	Electronic and vibrational excitations in carbon nanotubes. Carbon, 2003, 41, 985-992.	5 . 4	13
53	Hexagonal Mesoporous Silica for carbon capture: Unrevealing CO2 microscopic dynamics by Nuclear Magnetic Resonance. Journal of CO2 Utilization, 2022, 55, 101809.	3.3	13
54	Real space mapping of the surface atomic environment via low energy scattering spectroscopy. Surface Science, 1997, 384, 36-45.	0.8	12

#	Article	IF	CITATIONS
55	Writing submicrometric metallic patterns by ultraviolet synchrotron irradiation of nanostructured carbon and TiOx–carbon films. Applied Physics Letters, 2004, 84, 3412-3414.	1.5	12
56	Electronic, chemical and structural characterization of CNTs grown by acetylene decomposition over MgO supported Fe–Co bimetallic catalysts. Surface Science, 2007, 601, 2823-2827.	0.8	12
57	Island Organization of TiO2Hierarchical Nanostructures Induced by Surface Wetting and Drying. Langmuir, 2011, 27, 1935-1941.	1.6	12
58	Naphthalene-based periodic nanoporous organosilicas: II. Hydrogen and methane adsorption and physicochemical study. Microporous and Mesoporous Materials, 2012, 158, 332-338.	2.2	12
59	Microtomographic studies as a tool in the identification of a new ceramic class: The metal-imitating pottery as grave goods among Brettians and Lucanians. Microchemical Journal, 2016, 126, 138-148.	2.3	12
60	Surface modification of molecular sieve fillers for mixed matrix membranes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 538, 333-342.	2.3	12
61	Deep Insight Into the Electronic Structure of Ternary Topological Insulators: A Comparative Study of PbBi ₄ Te ₇ and PbBi ₆ Te ₁₀ . Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800341.	1.2	12
62	Assessment methodology of promising porous materials for near ambient temperature hydrogen storage applications. International Journal of Hydrogen Energy, 2018, 43, 14550-14556.	3.8	12
63	Status of compact inverse Compton sources in Italy: BriXS and STAR., 2019,,.		11
64	Orientational study of low coverage CO and NO on Ni(111). Surface Science, 1993, 289, L591-L594.	0.8	10
65	Nanocrystalline Metal/Carbon Composites Produced by Supersonic Cluster Beam Deposition. Journal of Nanoscience and Nanotechnology, 2005, 5, 1072-1080.	0.9	10
66	Enhanced hydrogen and methane storage of hybrid mesoporous organosilicas. Journal of Materials Chemistry A, 2016, 4, 9275-9285.	5.2	10
67	KVVAuger-electron diffraction patterns from carbon solids. Physical Review B, 1994, 49, 13820-13825.	1.1	9
68	Tailoring mesoporous silica by functionalization for gases (H ₂ , CH ₄ ,) Tj ETQq0 0 0 rgBT 810-819.	/Overlock 1.0	10 Tf 50 22 9
69	Architectural <i>Terracruda</i> Sculptures of the Silk Roads: New Conservation Insights Through a Diagnostic Approach Based on Non-Destructive X-ray Micro-Computed Tomography. Studies in Conservation, 2022, 67, 209-221.	0.6	9
70	A LabVIEW-based control system for a surface science experimental station. Measurement Science and Technology, 1994, 5, 1002-1011.	1.4	8
71	Analysis of extruded pins manufactured by friction stir forming for multi-material joining purposes. AIP Conference Proceedings, 2019, , .	0.3	8
72	Zinc(II) tetraphenylporphyrin on Au(111) investigated by scanning tunnelling microscopy and photoemission spectroscopy measurements. Nanotechnology, 2020, 31, 365603.	1.3	8

#	Article	IF	Citations
73	M4,5absorption edge of Ag, Pd, and Rh by reflection electron-energy-loss spectroscopy: Role of nondipole transitions. Physical Review B, 1991, 44, 10888-10891.	1.1	7
74	Unoccupied electronic states of CuO and Cu2O studied by secondary electron emission. Journal of Electron Spectroscopy and Related Phenomena, 1994, 70, 45-50.	0.8	7
75	HREELS, LEED and angle-scanned XPD investigation of the coadsorption of CO and NO on Ni(111). Surface Science, 1996, 356, 189-194.	0.8	7
76	Photoemission investigations on nanostructured TiO2 grown by cluster assembling. Surface Science, 2007, 601, 2688-2691.	0.8	7
77	Anomalous enhancement of Raman scattering of metal oxide film deposited on thermally treated ITO-coated glass substrates. Chemical Physics Letters, 2009, 478, 195-199.	1.2	7
78	Naphthalene-based periodic nanoporous organosilicas: I. Synthesis and structural characterization. Microporous and Mesoporous Materials, 2012, 158, 324-331.	2.2	7
79	Chemical Bonds and Charge-Transfer Dynamics of a Dye–Hierarchical-TiO ₂ Hybrid Interface. Journal of Physical Chemistry C, 2015, 119, 8671-8680.	1.5	7
80	Different spectroscopic behavior of coupled and freestanding monolayer graphene deposited by CVD on Cu foil. Applied Surface Science, 2018, 458, 580-585.	3.1	7
81	CO ₂ Adsorption Investigation on an Innovative Nanocomposite Material with Hierarchical Porosity. Journal of Nanoscience and Nanotechnology, 2019, 19, 3223-3231.	0.9	7
82	Assessment of poly(Lâ€lactide) as an environmentally benign CO 2 capture and storage adsorbent. Journal of Applied Polymer Science, 2020, 137, 49587.	1.3	7
83	Quaternized polyepichlorohydrin-based membrane as high-selective CO2 sorbent for cost-effective carbon capture. Journal of CO2 Utilization, 2022, 63, 102135.	3.3	7
84	Autoionization and energy-loss structures in Nb and Mo clean and oxygen-exposed surfaces. Surface Science, 1989, 211-212, 481-488.	0.8	6
85	Hydrogenation of carbidic carbon on Ni(111). Surface Science, 1992, 262, 1-7.	0.8	6
86	HREELS investigation of the coadsorption of CO and NO on Ni(111) at room temperature. Journal of Electron Spectroscopy and Related Phenomena, 1993, 64-65, 145-149.	0.8	6
87	Electronic properties of $(3/2\tilde{A}-3/2)$ -Na/Cu (111) . Journal of Electron Spectroscopy and Related Phenomena, 2008, 162, 25-29.	0.8	6
88	TCNQ Physisorption on the Topological Insulator Bi 2 Se 3. ChemPhysChem, 2018, 19, 2405-2410.	1.0	6
89	Photoelectron diffraction analysis of diamond and metal-diamond interfaces. Diamond and Related Materials, 1993, 2, 548-551.	1.8	5
90	Many-body effects in theM2,3VVAuger line shape of copper. Physical Review B, 1993, 48, 7779-7782.	1.1	5

#	Article	IF	CITATIONS
91	A chemical state resolved xâ€ray photoelectron diffraction study: Initial stages in diamondlike carbon film deposition. Journal of Applied Physics, 1996, 80, 2181-2186.	1.1	5
92	In situx-ray absorption study of Zr(V0.29Ni0.71)3 hydride electrodes. Physical Review B, 2000, 61, 13647-13654.	1.1	5
93	Resonant valence-band photoemission spectroscopy on the Fe62Ni20Cr18 alloy. European Physical Journal B, 2005, 43, 463-470.	0.6	5
94	Vibrational measurements of Na/Ni(111) and (NaÂ+ÂCO)/Ni(111). Journal of Materials Science, 2008, 43, 3447-3451.	1.7	5
95	Thermally induced modifications of the optic properties of lead zirconate titanate thin films obtained on different substrates by sol-gel synthesis. Journal of Applied Physics, 2008, 104, 123522.	1.1	5
96	Hydrogen storage performance of methyl-substituted mesoporous silica with tailored textural characteristics. Journal of Porous Materials, 2021, 28, 1049.	1.3	5
97	Study of Adsorption Behavior of Multi-Walled Carbon Nanotubes Towards Dyes Applied in Textile Applications. Advanced Science Letters, 2017, 23, 5851-5854.	0.2	5
98	Nondipole transitions at the 4dedges of Ta, Pt, and Au: Theory and experiment. Physical Review B, 1992, 46, 15660-15667.	1.1	4
99	Spatially resolved valence band study of nanostructured carbon films containing transition metal nanocrystals. Carbon, 2004, 42, 923-929.	5.4	4
100	Morphology and electronic structure of nanostructured carbon films embedding transition metal nanoparticles. European Physical Journal D, 2003, 24, 273-276.	0.6	3
101	Electrical conductivity of cluster-assembled carbon/titania nanocomposite films irradiated by highly focused vacuum ultraviolet photon beams. Journal of Applied Physics, 2007, 101, 064314.	1.1	3
102	Metallic Tin-Filling Effects on Carbon Nanotubes Revealed by Atomically Resolved Spectro-Microscopies. Journal of Nano Research, 0, 3, 1-6.	0.8	3
103	Adsorption of Nile Red Self-Assembled Monolayers on Au(111). Langmuir, 2019, 35, 14761-14768.	1.6	3
104	Electronic band structure of three-dimensional topological insulators with different stoichiometry composition. Physical Review B, 2020, 102 , .	1.1	3
105	The Deltah Lab, a New Multidisciplinary European Facility to Support the H2 Distribution & Storage Economy. Applied Sciences (Switzerland), 2021, 11, 3272.	1.3	3
106	Exploring Compound Eyes in Adults of Four Coleopteran Species Using Synchrotron X-ray Phase-Contrast Microtomography (SR-PhC Micro-CT). Life, 2022, 12, 741.	1.1	3
107	Electronic, chemical and structural characterization of CNTs grown by SiC surface decomposition. Journal of Physics: Conference Series, 2008, 100, 052093.	0.3	2
108	Structural characterization of submonolayer C/Al(111). Surface Science, 1998, 395, 120-129.	0.8	1

#	Article	IF	CITATIONS
109	Effects of predosed oxygen and hydrogen on CO adsorption on Ni(100). Surface Science, 2007, 601, 104-111.	0.8	1
110	Command and control system for the STAR X-ray source. Fusion Engineering and Design, 2019, 146, 1947-1953.	1.0	1
111	Orientational study of low coverage CO and NO on Ni(111). Surface Science Letters, 1993, 289, L591-L594.	0.1	O
112	X-ray photoelectron diffraction study of CO- and NO-saturated Ni(111). Surface Science Letters, 1993, 282, A198.	0.1	0
113	Raman Scattering Enhancement Associated to Sodium Oxide Formation after Thermal Treatment of Glass Substrates. , 2010, , .		O
114	Neutronic Calculations for the Shielding Design of the VESPA Instrument at the European Spallation Source. Journal of Surface Investigation, 2020, 14, S190-S194.	0.1	0
115	Liquid-like Hydrogen in the Ultra-Micropores of Commercial Activated Carbons. ECS Meeting Abstracts, 2016, , .	0.0	0