Silvano Lizzit

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Bandgap opening in graphene induced by patterned hydrogen adsorption. Nature Materials, 2010, 9, 315-319.	27.5	1,344
2	Single-Wall Carbon Nanotube Interaction with Gases:Â Sample Contaminants and Environmental Monitoring. Journal of the American Chemical Society, 2003, 125, 11329-11333.	13.7	261
3	Oxygen Switching of the Epitaxial Grapheneâ€"Metal Interaction. ACS Nano, 2012, 6, 9551-9558.	14.6	195
4	Growth of Dome-Shaped Carbon Nanoislands on Ir(111): The Intermediate between Carbidic Clusters and Quasi-Free-Standing Graphene. Physical Review Letters, 2009, 103, 166101.	7.8	178
5	Thermal Expansion of Supported and Freestanding Graphene: Lattice Constant versus Interatomic Distance. Physical Review Letters, 2011, 106, 135501.	7.8	148
6	Real-time X-ray photoelectron spectroscopy of surface reactions. Surface Science Reports, 2003, 49, 169-224.	7.2	126
7	Transfer-Free Electrical Insulation of Epitaxial Graphene from its Metal Substrate. Nano Letters, 2012, 12, 4503-4507.	9.1	120
8	Epitaxial Growth of Hexagonal Boron Nitride on Ir(111). Journal of Physical Chemistry C, 2012, 116, 157-164.	3.1	69
9	Controlling Hydrogenation of Graphene on Ir(111). ACS Nano, 2013, 7, 3823-3832.	14.6	69
10	Epitaxial growth of single-orientation high-quality MoS ₂ monolayers. 2D Materials, 2018, 5, 035012.	4.4	65
11	Epitaxial Growth of a Single-Domain Hexagonal Boron Nitride Monolayer. ACS Nano, 2014, 8, 12063-12070.	14.6	64
12	Unveiling the Mechanisms Leading to H₂ Production Promoted by Water Decomposition on Epitaxial Graphene at Room Temperature. ACS Nano, 2016, 10, 4543-4549.	14.6	60
13	Local Electronic Structure and Density of Edge and Facet Atoms at Rh Nanoclusters Self-Assembled on a Graphene Template. ACS Nano, 2012, 6, 3034-3043.	14.6	49
14	Band dispersion in the deep 1s core level ofÂgraphene. Nature Physics, 2010, 6, 345-349.	16.7	48
15	Novel single-layer vanadium sulphide phases. 2D Materials, 2018, 5, 045009.	4.4	48
16	High-resolution fast X-ray photoelectron spectroscopy study of ethylene interaction with Ir(111): From chemisorption to dissociation and graphene formation. Catalysis Today, 2010, 154, 68-74.	4.4	45
17	Spectro-microscopic photoemission evidence of charge uncompensated areas in Pb(Zr,Ti)O₃(001) layers. Physical Chemistry Chemical Physics, 2015, 17, 509-520.	2.8	43
18	Core level shifts of undercoordinated Pt atoms. Journal of Chemical Physics, 2008, 128, 114706.	3.0	41

#	ARTICLE	IF	CITATIONS
19	Bottom-up approach for the low-cost synthesis of graphene-alumina nanosheet interfaces using bimetallic alloys. Nature Communications, 2014, 5, 5062.	12.8	37
20	Ion Implantation as an Approach for Structural Modifications and Functionalization of Ti₃C₂T_{<i>x</i>} MXenes. ACS Nano, 2021, 15, 4245-4255.	14.6	37
21	Self-Assembly of Graphene Nanoblisters Sealed to a Bare Metal Surface. Nano Letters, 2016, 16, 1808-1817.	9.1	36
22	Revealing the Adsorption Mechanisms of Nitroxides on Ultrapure, Metallicity-Sorted Carbon Nanotubes. ACS Nano, 2014, 8, 1375-1383.	14.6	31
23	Oxygen adsorption and ordering onRu(101Â¯0). Physical Review B, 2001, 63, .	3.2	30
24	Geometric and electronic structure of theNâˆ•Rh(100)system by core-level photoelectron spectroscopy: Experiment and theory. Physical Review B, 2006, 74, .	3.2	29
25	Ethylene decomposition on Ir(111): initial path to graphene formation. Physical Chemistry Chemical Physics, 2016, 18, 27897-27909.	2.8	28
26	Spin Structure of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>K</mml:mi></mml:math> Valleys in Single-Layer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></m on Au(111). Physical Review Letters, 2018, 121, 136402.	7.8	28
27	Key role of rotated domains in oxygen intercalation at graphene on Ni(1â€‰1â€‰1). 2D Materials, 2017, 4, 025106.	4.4	26
28	Enhanced Chemical Reactivity of Under-Coordinated Atoms at Ptâˆ'Rh Bimetallic Surfaces: A Spectroscopic Characterization. Journal of Physical Chemistry C, 2011, 115, 3378-3384.	3.1	24
29	Unravelling the roles of surface chemical composition and geometry for the grapheneâ€“metal interaction through C1s core-level spectroscopy. Carbon, 2015, 93, 187-198.	10.3	18
30	Photoemission investigation of oxygen intercalated epitaxial graphene on Ru(0001). Surface Science, 2018, 678, 57-64.	1.9	18
31	Growth and structure of singly oriented single-layer tungsten disulfide on Au(111). Physical Review Materials, 2019, 3, .	2.4	18
32	Graphene growth by molecular beam epitaxy: an interplay between desorption, diffusion and intercalation of elemental C species on islands. Nanoscale, 2018, 10, 7396-7406.	5.6	17
33	Ultrafast Charge Transfer at Monolayer Graphene Surfaces with Varied Substrate Coupling. ACS Nano, 2013, 7, 4359-4366.	14.6	16
34	Mixed Cation Halide Perovskite under Environmental and Physical Stress. Materials, 2021, 14, 3954.	2.9	14
35	Chemical gating of epitaxial graphene through ultrathin oxide layers. Nanoscale, 2015, 7, 12650-12658.	5.6	13
36	The adsorption of silicon on an iridium surface ruling out silicene growth. Nanoscale, 2018, 10, 7085-7094.	5.6	13

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37	Molecular Lifting, Twisting, and Curling during Metal-Assisted Polycyclic Hydrocarbon Dehydrogenation. Journal of the American Chemical Society, 2016, 138, 3395-3402.	13.7	12
38	Momentum-resolved linear dichroism in bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mn Physical Review B, 2019, 100, .	3.2	12
39	Unexpected Rotamerism at the Origin of a Chessboard Supramolecular Assembly of Ruthenium Phthalocyanine. Chemistry - A European Journal, 2017, 23, 16319-16327.	3.3	11
40	Translucency of Graphene to van der Waals Forces Applies to Atoms/Molecules with Different Polar Character. ACS Nano, 2019, 13, 12230-12241.	14.6	11
41	Layer and orbital interference effects in photoemission from transition metal dichalcogenides. Physical Review B, 2019, 100, .	3.2	11
42	Bis(triisopropylsilylethynyl)pentacene/Au(111) Interface: Coupling, Molecular Orientation, and Thermal Stability. Journal of Physical Chemistry C, 2014, 118, 22522-22532.	3.1	10
43	Growth, Stability, and Electronic Decoupling of Pt Clusters on h-BN/Ir(111). Journal of Physical Chemistry C, 2021, 125, 3880-3889.	3.1	10
44	Effects of the interatomic-potential anharmonicity on the bulk and surface photoemission core levels. Physical Review B, 2000, 61, 12713-12716.	3.2	9
45	Spectroscopic Fingerprints of Carbon Monomers and Dimers on Ir(111): Experiment and Theory. Journal of Physical Chemistry C, 2017, 121, 11335-11345.	3.1	9
46	Spectroscopic view of ultrafast charge carrier dynamics in single- and bilayer transition metal dichalcogenide semiconductors. Journal of Electron Spectroscopy and Related Phenomena, 2021, 250, 147093.	1.7	9
47	Layer-dependent Debye temperature and thermal expansion of Ru(0001) by means of high-energy resolution core-level photoelectron spectroscopy. Physical Review B, 2010, 82, .	3.2	8
48	Disentangling Vacancy Oxidation on Metallicity-Sorted Carbon Nanotubes. Journal of Physical Chemistry C, 2016, 120, 18316-18322.	3.1	8
49	Dual-Route Hydrogenation of the Graphene/Ni Interface. ACS Nano, 2019, 13, 1828-1838.	14.6	8
50	Experimental and Theoretical Surface Core Level Shift Study of the S-Rh(100) Local Environment. Journal of Physical Chemistry C, 2007, 111, 4003-4013.	3.1	7
51	A first-principles study of stability of surface confined mixed metal oxides with corundum structure (Fe2O3, Cr2O3, V2O3). Physical Chemistry Chemical Physics, 2018, 20, 7073-7081.	2.8	7
52	Interfacial two-dimensional oxide enhances photocatalytic activity of graphene/titania via electronic structure modification. Carbon, 2020, 157, 350-357.	10.3	7
53	Resistance hysteresis correlated with synchrotron radiation surface studies in atomic sp² layers of carbon synthesized on ferroelectric (001) lead zirconate titanate in an ultrahigh vacuum. RSC Advances, 2020, 10, 1522-1534.	3.6	7
54	Hydrogen interaction with graphene on Ir(1â€‰1â€‰1): a combined intercalation and functionalization study. Journal of Physics Condensed Matter, 2019, 31, 085001.	1.8	6

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55	Cluster Superlattice Membranes. ACS Nano, 2020, 14, 13629-13637.	14.6	6
56	Thermal Annealing of Graphene Implanted with Mn at Ultralow Energies: From Disordered and Contaminated to Nearly Pristine Graphene. Journal of Physical Chemistry C, 2022, 126, 10494-10505.	3.1	6
57	Comparison of surface structures of corundum Cr₂O₃(0â€‰0â€‰0â€‰1) and V₂O₃(0â€‰0â€‰0â€‰1) ultrathin films by x-ray photoelectron diffraction. Journal of Physics Condensed Matter, 2018, 30, 074002.	1.8	5
58	Anisotropic strain in epitaxial single-layer molybdenum disulfide on Ag(110). Nanoscale, 2021, 13, 18789-18798.	5.6	5
59	Growth Mechanism and Thermal Stability of a MoS₂â€“Graphene Interface: A High-Resolution Core-Level Photoelectron Spectroscopy Study. Journal of Physical Chemistry C, 2020, 124, 20889-20897.	3.1	4
60	Reversible changes in the electronic structure of carbon nanotube-hybrids upon NO₂ exposure under ambient conditions. Journal of Materials Chemistry A, 2020, 8, 9753-9759.	10.3	4
61	Unusual reversibility in molecular break-up of PAHs: the case of pentacene dehydrogenation on Ir(111). Chemical Science, 2021, 12, 170-178.	7.4	4
62	Atomic Undercoordination in Ag Islands on Ru(0001) Grown via Size-Selected Cluster Deposition: An Experimental and Theoretical High-Resolution Core-Level Photoemission Study. Journal of Physical Chemistry C, 2021, 125, 9556-9563.	3.1	4
63	Ethylene Dissociation on Ni₃Al(111). Journal of Physical Chemistry C, 2017, 121, 7967-7976.	3.1	2
64	Role of the Metal Surface on the Room Temperature Activation of the Alcohol and Amino Groups of <i>p</i>-Aminophenol. Journal of Physical Chemistry C, 2020, 124, 19655-19665.	3.1	2
65	Vibrational Fine Structure in C 1s High-Resolution Core-Level Spectra of CO Chemisorbed on Ir(111). Journal of Physical Chemistry C, 2022, 126, 1411-1419.	3.1	2
66	Carbon Embedding of Pt Cluster Superlattices Templated by Hexagonal Boron Nitride on Ir(111). Journal of Physical Chemistry C, 2021, 125, 23435-23444.	3.1	1