Carlo Grazianetti

List of Publications by Year
in descending order

41 papers	3,579 citations	361296 20 h-index	315616 38 g-index
43 all docs	43 docs citations	43 times ranked	3719 citing authors

#	Article	IF	Citations
1	Stability and universal encapsulation of epitaxial Xenes. Faraday Discussions, 2021, 227, 171-183.	1.6	24
2	Optical Properties of Stanene-like Nanosheets on Al₂O₃(0001): Implications for Xene Photonics. ACS Applied Nano Materials, 2021, 4, 2351-2356.	2.4	7
3	Hydrophilic Character of Single-Layer MoS₂ Grown on Ag(111). Journal of Physical Chemistry C, 2021, 125, 9479-9485.	1.5	11
4	Probing the Laser Ablation of Black Phosphorus by Raman Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 8704-8711.	1.5	4
5	Twoâ€Dimensional Siliceneâ€“Stanene Heterostructures by Epitaxy. Advanced Functional Materials, 2021, 31, 2102797.	7.8	23
6	How Oxygen Absorption Affects the Al 2 O 3 â€Encapsulated Blue Phosphoreneâ€“Au Alloy. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100217.	1.2	1
7	The Rise of the Xenes: From the Synthesis to the Integration Processes for Electronics and Photonics. Materials, 2021, 14, 4170.	1.3	13
8	The Xenes Generations: A Taxonomy of Epitaxial Singleâ€Element 2D Materials. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900439.	1.2	42
9	Disassembling Silicene from Native Substrate and Transferring onto an Arbitrary Target Substrate. Advanced Functional Materials, 2020, 30, 2004546.	7.8	21
10	Thickness determination of anisotropic van der Waals crystals by raman spectroscopy: the case of black phosphorus. Nanotechnology, 2020, 31, 415703.	1.3	8
11	Two-dimensional Xenes and their device concepts for future micro- and nanoelectronics and energy applications. , 2020, , 181-219.		1
12	Embedding epitaxial (blue) phosphorene in between device-compatible functional layers. Nanoscale, 2019, 11, 18232-18237.	2.8	15
13	Engineering Epitaxial Silicene on Functional Substrates for Nanotechnology. Research, 2019, 2019, 8494606.	2.8	7
14	Encapsulated Silicene Field-Effect Transistors. Nanoscience and Technology, 2018, , 235-254.	1.5	1
15	Optical Conductivity of Two-Dimensional Silicon: Evidence of Dirac Electrodynamics. Nano Letters, 2018, 18, 7124-7132.	4.5	34
16	Silicene, silicene derivatives, and their device applications. Chemical Society Reviews, 2018, 47, 6370-6387.	18.7	261
17	Silicon Nanosheets: Crossover between Multilayer Silicene and Diamond-like Growth Regime. ACS Nano, 2017, 11, 3376-3382.	7.3	61
18	Ultrafast carrier dynamics of epitaxial silicene. , 2017, , .		3

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19	Electron Confinement at the Si/MoS₂ Heterosheet Interface. Advanced Materials Interfaces, 2016, 3, 1500619.	1.9	28
20	(Invited) Silicene: Silicon at the Two Dimensional Limit and Its Applications to Nanoelectronics. ECS Transactions, 2016, 75, 703-709.	0.3	7
21	Two-dimensional silicon: the advent of silicene. 2D Materials, 2016, 3, 012001.	2.0	155
22	Optical response and ultrafast carrier dynamics of the silicene-silver interface. Physical Review B, 2015, 92, .	1.1	37
23	Silicene field-effect transistors operating at room temperature. Nature Nanotechnology, 2015, 10, 227-231.	15.6	1,429
24	Nucleation and temperature-driven phase transitions of silicene superstructures on Ag(1â€‰1â€‰1). Journal of Physics Condensed Matter, 2015, 27, 255005.	0.7	23
25	Ultrafast Dynamics in Epitaxial Silicene on Ag(111). Springer Proceedings in Physics, 2015, , 329-332.	0.1	2
26	Ultrafast dynamics in epitaxial silicene on Ag(111). , 2014, , .		0
27	Engineering the electronic properties of silicene by tuning the composition of MoX ₂ and GaX (X = S,Se,Te) chalchogenide templates. 2D Materials, 2014, 1, 011010.	2.0	53
28	Twoâ€Dimensional Si Nanosheets with Local Hexagonal Structure on a MoS₂ Surface. Advanced Materials, 2014, 26, 2096-2101.	11.1	311
29	Exploring the morphological and electronic properties of silicene superstructures. Applied Surface Science, 2014, 291, 109-112.	3.1	34
30	Vibrational properties of epitaxial silicene layers on (111) Ag. Applied Surface Science, 2014, 291, 113-117.	3.1	49
31	Theoretical aspects of graphene-like group IV semiconductors. Applied Surface Science, 2014, 291, 98-103.	3.1	23
32	Getting through the Nature of Silicene: An sp²â€“sp³ Two-Dimensional Silicon Nanosheet. Journal of Physical Chemistry C, 2013, 117, 16719-16724.	1.5	163
33	Evidence for graphite-like hexagonal AlN nanosheets epitaxially grown on single crystal Ag(111). Applied Physics Letters, 2013, 103, .	1.5	251
34	Nanostructures: Hindering the Oxidation of Silicene with Non-Reactive Encapsulation (Adv. Funct.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	7.8	2
35	Hindering the Oxidation of Silicene with Nonâ€Reactive Encapsulation. Advanced Functional Materials, 2013, 23, 4340-4344.	7.8	161
36	(Invited) Structural and Chemical Stabilization of the Epitaxial Silicene. ECS Transactions, 2013, 58, 217-227.	0.3	5

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37	Atomic Layer Deposition of Al-Doped ZrO2Thin Films as Gate Dielectric for In0.53Ga0.47As. Journal of the Electrochemical Society, 2012, 159, H220-H224.	1.3	11
38	Effect of Electric Dipoles on Fermi Level Positioning at the Interface between Ultrathin Al₂O₃ Films and Differently Reconstructed In_{0.53}Ga_{0.47}As(001) Surfaces. Journal of Physical Chemistry C, 2012, 116, 18746-18751.	1.5	4
39	Local Electronic Properties of Corrugated Silicene Phases. Advanced Materials, 2012, 24, 5088-5093.	11.1	278
40	Reconstruction dependent reactivity of As-decapped In0.53Ga0.47As(001) surfaces and its influence on the electrical quality of the interface with Al2O3 grown by atomic layer deposition. Applied Physics Letters, 2011, 99, .	1.5	11
41	Atomic Layer Deposition of Al-Doped ZrO2 Thin Films for Advanced Gate Stack on III-V Substrates. ECS Transactions, 2011, 35, 431-440.	0.3	1