Emilio Scalise

List of Publications by Year
in descending order

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39 papers	2,414 citations	471509 17 h-index	315739 38 g-index
40 all docs	40 docs citations	40 times ranked	3161 citing authors

#	Article	IF	Citations
1	Strain-induced semiconductor to metal transition in the two-dimensional honeycomb structure of MoS2. Nano Research, 2012, 5, 43-48.	10.4	620
2	Electronic properties of hydrogenated silicene and germanene. Applied Physics Letters, 2011, 98, .	3.3	399
3	Twoâ€Đimensional Si Nanosheets with Local Hexagonal Structure on a MoS₂ Surface. Advanced Materials, 2014, 26, 2096-2101.	21.0	311
4	Getting through the Nature of Silicene: An sp²â€“sp³ Two-Dimensional Silicon Nanosheet. Journal of Physical Chemistry C, 2013, 117, 16719-16724.	3.1	163
5	Vibrational properties of silicene and germanene. Nano Research, 2013, 6, 19-28.	10.4	144
6	First-principles study of strained 2D MoS2. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 56, 416-421.	2.7	119
7	Two-dimensional hexagonal tin: ab initio geometry, stability, electronic structure and functionalization. 2D Materials, 2014, 1, 021004.	4.4	107
8	An electric field tunable energy band gap at silicene/(0001) ZnS interfaces. Physical Chemistry Chemical Physics, 2013, 15, 3702.	2.8	86
9	First-principles electronic functionalization of silicene and germanene by adatom chemisorption. Applied Surface Science, 2014, 291, 104-108.	6.1	69
10	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.	4.4	53
11	Vibrational properties of epitaxial silicene layers on (111) Ag. Applied Surface Science, 2014, 291, 113-117.	6.1	49
12	New Approaches and Understandings in the Growth of Cubic Silicon Carbide. Materials, 2021, 14, 5348.	2.9	34
13	Temperature-Dependent Stability of Polytypes and Stacking Faults in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mrow><mml:mi>Si</mml:mi><mml:mi mathvariant="normal">C</mml:mi></mml:mrow></mml:math>: Reconciling Theory and Experiments. Physical Review Applied, 2019, 12, .	3.8	33
14	Silicene on non-metallic substrates: Recent theoretical and experimental advances. Nano Research, 2018, 11, 1169-1182.	10.4	31
15	Surface chemistry and buried interfaces in all-inorganic nanocrystalline solids. Nature Nanotechnology, 2018, 13, 841-848.	31.5	30
16	Stability and universal encapsulation of epitaxial Xenes. Faraday Discussions, 2021, 227, 171-183.	3.2	24
17	Theoretical aspects of graphene-like group IV semiconductors. Applied Surface Science, 2014, 291, 98-103.	6.1	23
18	Kinetic Control of Morphology and Composition in Ge/GeSn Core/Shell Nanowires. ACS Nano, 2020, 14, 2445-2455.	14.6	17

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19	Molecular dynamics simulations of extended defects and their evolution in 3Câ€“SiC by different potentials. Modelling and Simulation in Materials Science and Engineering, 2020, 28, 015002.	2.0	15
20	The origin and nature of killer defects in 3C-SiC for power electronic applications by a multiscale atomistic approach. Journal of Materials Chemistry C, 2020, 8, 8380-8392.	5.5	15
21	Predicting 2D silicon allotropes on SnS2. Nano Research, 2017, 10, 1697-1709.	10.4	10
22	(Invited) Theoretical Study of Silicene and Germanene. ECS Transactions, 2013, 53, 51-62.	0.5	9
23	Unveiling Planar Defects in Hexagonal Group IV Materials. Nano Letters, 2021, 21, 3619-3625.	9.1	8
24	Exciton-driven change of phonon modes causes strong temperature dependent bandgap shift in nanoclusters. Nature Communications, 2020, 11, 4127.	12.8	7
25	Structural and vibrational properties of amorphous GeO2 from first-principles. Applied Physics Letters, 2011, 98, .	3.3	6
26	(Invited) Structural and Chemical Stabilization of the Epitaxial Silicene. ECS Transactions, 2013, 58, 217-227.	0.5	5
27	Interaction of silicene and germanene with non-metallic substrates. Journal of Physics: Conference Series, 2015, 574, 012015.	0.4	5
28	Tailoring the electronic properties of semiconducting nanocrystal-solids. Semiconductor Science and Technology, 2020, 35, 013001.	2.0	5
29	Vibrational Properties of Defective Oxides and 2D Nanolattices. Springer Theses, 2014, , .	0.1	3
30	Thermodynamic driving force in the formation of hexagonal-diamond Si and Ge nanowires. Applied Surface Science, 2021, 545, 148948.	6.1	3
31	The formation of a Sn monolayer on Ge(1 0 0) studied at the atomic scale. Applied Surface Science, 2021, 561, 149961.	6.1	3
32	Theoretical Study of Ge Dangling Bonds in GeO₂ and Correlation with ESR Results at Ge/GeO₂ Interfaces. ECS Transactions, 2011, 41, 39-45.	0.5	1
33	Interaction of Germanene with (0001)ZnSe Surfaces: A Theoretical Study. ECS Transactions, 2013, 58, 209-215.	0.5	1
34	(Invited) Interaction of Silicene and Germanene with Non-Metallic Substrates. ECS Transactions, 2014, 64, 111-119.	0.5	1
35	Prismatic Ge-rich inclusions in the hexagonal SiGe shell of GaPâ€“Siâ€“SiGe nanowires by controlled faceting. Nanoscale, 2021, 13, 9436-9445.	5.6	1
36	New insights into the electronic states of the Ge(0 0 1) surface by joint angle-resolved photoelectron spectroscopy and first-principle calculation investigation. Applied Surface Science, 2022, 571, 151264.	6.1	1

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37	Evolution and Intersection of Extended Defects and Stacking Faults in 3Câ€SiC Layers on Si (001) Substrates by Molecular Dynamics Simulations: The Forest Dislocation Case. Physica Status Solidi (B): Basic Research, 2022, 259, .	1.5	1
38	Impact of inversion domain boundaries on the electronic properties of 3Câ€SiC. Physica Status Solidi (B): Basic Research, 0, , .	1.5	1
39	Inelastic electron tunneling spectroscopy of HfO2 gate stacks: A study based on first-principles modeling. Applied Physics Letters, 2011, 99, 132101.	3.3	0