Nicola Ferralis

List of Publications by Year
in descending order

47	1,857	279798 23	254184 43
papers	citations	h-index	g-index

47	47	47	3020
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evidence of Structural Strain in Epitaxial Graphene Layers on 6H-SiC(0001). Physical Review Letters, 2008, 101, 156801.	7.8	274
2	Templated assembly of photoswitches significantly increases the energy-storage capacity of solar thermal fuels. Nature Chemistry, 2014, 6, 441-447.	13.6	261
3	Rapid, direct and non-destructive assessment of fossil organic matter via microRaman spectroscopy. Carbon, 2016, 108, 440-449.	10.3	118
4	Nanocarbon-Based Photovoltaics. ACS Nano, 2012, 6, 8896-8903.	14.6	117
5	Solar energy generation in three dimensions. Energy and Environmental Science, 2012, 5, 6880.	30.8	73
6	Effect of Electrochemical Charging on Elastoplastic Properties and Fracture Toughness of Li_XCoO₂. Journal of the Electrochemical Society, 2014, 161, F3084-F3090.	2.9	68
7	The adsorption sites of rare gases on metallic surfaces: a review. Journal of Physics Condensed Matter, 2004, 16, S2839-S2862.	1.8	67
8	Growth of branching Si nanowires seeded by Auâ€“Si surface migration. Journal of Materials Chemistry, 2008, 18, 5376.	6.7	54
9	Temperature-Induced Self-Pinning and Nanolayering of AuSi Eutectic Droplets. Journal of the American Chemical Society, 2008, 130, 2681-2685.	13.7	50
10	Process Control of Atomic Layer Deposition Molybdenum Oxide Nucleation and Sulfidation to Large-Area MoS₂ Monolayers. Chemistry of Materials, 2017, 29, 2024-2032.	6.7	47
11	Strain-induced accelerated asymmetric spatial degradation of polymeric vascular scaffolds. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2640-2645.	7.1	46
12	Passive Sub-Ambient Cooling from a Transparent Evaporation-Insulation Bilayer. Joule, 2020, 4, 2693-2701.	24.0	44
13	Acid demineralization with critical point drying: A method for kerogen isolation that preserves microstructure. Fuel, 2014, 135, 492-497.	6.4	43
14	Evolution of Topological Order in Xe Films on a Quasicrystal Surface. Physical Review Letters, 2005, 95, 136104.	7.8	40
15	Laser-engineered heavy hydrocarbons: Old materials with new opportunities. Science Advances, 2020, 6, eaaz5231.	10.3	40
16	Rethinking Coal: Thin Films of Solution Processed Natural Carbon Nanoparticles for Electronic Devices. Nano Letters, 2016, 16, 2951-2957.	9.1	39
17	Low-energy electron diffraction from quasicrystal surfaces. Journal of Physics Condensed Matter, 2003, 15, R63-R81.	1.8	35
18	Growth of Epitaxial 3C-SiC Films on Si(100) via Low Temperature SiC Buffer Layer. Crystal Growth and Design, 2010, 10, 36-39.	3.0	32

#	Article	IF	Citations
19	Structure and Morphology of Annealed Gold Films Galvanically Displaced on the Si(111) Surface. Journal of Physical Chemistry C, 2007, 111, 7508-7513.	3.1	31
20	Dynamical low-energy electron diffraction study of graphite (0001)-(âˆš3Ã—âˆš3)R30Â°-Xe. Surface Science, 2004, 548, 157-162.	1.9	30
21	Spatially-resolved isotopic study of carbon trapped in âˆ¼3.43â€¯Ga Strelley Pool Formation stromatolites. Geochimica Et Cosmochimica Acta, 2018, 223, 21-35.	3.9	26
22	Highly Conductive and Permeable Nanocomposite Ultrafiltration Membranes Using Laser-Reduced Graphene Oxide. Nano Letters, 2021, 21, 2429-2435.	9.1	26
23	Genome-inspired molecular identification in organic matter via Raman spectroscopy. Carbon, 2016, 101, 361-367.	10.3	24
24	Upgrading carbonaceous materials: Coal, tar, pitch, and beyond. Matter, 2022, 5, 430-447.	10.0	24
25	Diffraction from one- and two-dimensional quasicrystalline gratings. American Journal of Physics, 2004, 72, 1241-1246.	0.7	23
26	The adsorption of Xe and Ar on quasicrystalline Alâ€“Niâ€“Co. Journal of Physics Condensed Matter, 2004, 16, S2911-S2921.	1.8	21
27	Evolution in surface morphology of epitaxial graphene layers on SiC induced by controlled structural strain. Applied Physics Letters, 2008, 93, 191916.	3.3	20
28	Real-Time Observation of Reactive Spreading of Gold on Silicon. Physical Review Letters, 2009, 103, 256102.	7.8	19
29	Catalyst Self-Assembly for Scalable Patterning of Sub 10 nm Ultrahigh Aspect Ratio Nanopores in Silicon. ACS Applied Materials & Interfaces, 2016, 8, 8043-8049.	8.0	18
30	Direct correlation between aromatization of carbon-rich organic matter and its visible electronic absorption edge. Carbon, 2015, 88, 139-147.	10.3	17
31	Carbon fiber synthesis from pitch: Insights from ReaxFF based molecular dynamics simulations. Carbon, 2021, 176, 569-579.	10.3	17
32	Natural Carbon Byâ€Products for Transparent Heaters: The Case of Steamâ€Cracker Tar. Advanced Materials, 2019, 31, e1900331.	21.0	13
33	Organo-mineral associations in chert of the 3.5 Ga Mount Ada Basalt raise questions about the origin of organic matter in Paleoarchean hydrothermally influenced sediments. Scientific Reports, 2019, 9, 16712.	3.3	13
34	Experimental Investigation of Silicon Surface Migration in Low Pressure Nonreducing Gas Environments. Electrochemical and Solid-State Letters, 2009, 12, H437.	2.2	12
35	Atoms to fibers: Identifying novel processing methods in the synthesis of pitch-based carbon fibers. Science Advances, 2022, 8, eabn1905.	10.3	12
36	Evolution of interfacial intercalation chemistry on epitaxial graphene/SiC by surface enhanced Raman spectroscopy. Applied Surface Science, 2014, 320, 441-447.	6.1	11

#	Article	IF	Citations
37	Structural evolutions of small aromatic mixtures under extreme temperature conditions: Insights from ReaxFF molecular dynamics investigations. Carbon, 2019, 155, 309-319.	10.3	10
38	Laser-Induced Tar-Mediated Sintering of Metals and Refractory Carbides in Air. ACS Nano, 2020, 14, 10413-10420.	14.6	9
39	Electronic, Structural, and Magnetic Upgrading of Coal-Based Products through Laser Annealing. ACS Nano, 2022, 16, 2101-2109.	14.6	9
40	Substitutional adsorption geometry for Pb(111)â€“(âˆš3Ã—âˆš3)R30Â°â€“K. Surface Science, 2006, 600, 537-541.	1.9	6
41	Tunable in situ growth of porous cubic silicon carbide thin films via methyltrichlorosilane-based chemical vapor deposition. Applied Physics Letters, 2009, 95, 101901.	3.3	5
42	Charge Transport in Highly Heterogeneous Natural Carbonaceous Materials. Advanced Functional Materials, 2019, 29, 1904283.	14.9	5
43	Resolving sub-nm steps with a low-voltage miniature scanning electron microscope. Microelectronic Engineering, 2009, 86, 1004-1008.	2.4	3
44	LEED study of the potassium-induced reconstruction of Cu(110). Journal of Physics Condensed Matter, 2001, 13, 3961-3967.	1.8	2
45	Al-2 % Si Induced Crystallization of Amorphous Silicon. Electrochemical and Solid-State Letters, 2007, 10, H337-H339.	2.2	1
46	Debye temperature of the 10-fold d-Alâ€“Niâ€“Co quasicrystal surface. Surface Science, 2008, 602, 1223-1226.	1.9	1
47	Unintended consequences: Why carbonation can dominate in microscale hydration of calcium silicates. Journal of Materials Research, 2015, 30, 2425-2433.	2.6	1