Francesco Fornasiero

List of Publications by Year in Descending Order

41 papers	2,812 citations	20 h-index	43 g-index
43 ext. papers	3,109 ext. citations	10.3 avg, IF	4.81 L-index

#	Paper	IF	Citations
41	Carbon Nanotube Composite Materials for Nanofiltration **2021**, 1021-1055		1
40	Fast Permeation of Small Ions in Carbon Nanotubes. *Advanced Science*, **2021**, 8, 2001802	13.6	6
39	Structural Anomalies and Electronic Properties of an Ionic Liquid under Nanoscale Confinement. *Journal of Physical Chemistry Letters*, **2020**, 11, 6150-6155	6.4	2
38	Autonomously Responsive Membranes for Chemical Warfare Protection. *Advanced Functional Materials*, **2020**, 30, 2000258	15.6	22
37	Large Area, High-Density SWCNT Forests with Remarkably Invariant Structural Properties over a Wide Range of Synthesis Conditions. *ECS Meeting Abstracts*, **2020**, MA2020-01, 666-666	0	
36	Scalable electric-field-assisted fabrication of vertically aligned carbon nanotube membranes with flow enhancement. *Carbon*, **2020**, 157, 208-216	10.4	10
35	High-yield growth kinetics and spatial mapping of single-walled carbon nanotube forests at wafer scale. *Carbon*, **2020**, 159, 236-246	10.4	6
34	Ultra-Permeable Single-Walled Carbon Nanotube Membranes with Exceptional Performance at Scale. *Advanced Science*, **2020**, 7, 2001670	13.6	12
33	Biomimetic potassium-selective nanopores. *Science Advances*, **2019**, 5, eaav2568	14.3	74
32	Effect of Enhanced Thermal Stability of Alumina Support Layer on Growth of Vertically Aligned Single-Walled Carbon Nanotubes and Their Application in Nanofiltration Membranes. *Nanoscale Research Letters*, **2018**, 13, 173	5	8
31	Carbon Nanotubes and Related Nanomaterials: Critical Advances and Challenges for Synthesis toward Mainstream Commercial Applications. *ACS Nano*, **2018**, 12, 11756-11784	16.7	239
30	Quantifying the Hierarchical Order in Self-Aligned Carbon Nanotubes from Atomic to Micrometer Scale. *ACS Nano*, **2017**, 11, 5405-5416	16.7	28
29	Water vapor transport in carbon nanotube membranes and application in breathable and protective fabrics. *Current Opinion in Chemical Engineering*, **2017**, 16, 1-8	5.4	28
28	Improving on aquaporins. *Science*, **2017**, 357, 753	33.3	17
27	Carbon Nanotubes: Ultrabreathable and Protective Membranes with Sub-5 nm Carbon Nanotube Pores (Adv. Mater. 28/2016). *Advanced Materials*, **2016**, 28, 6020	24	5
26	Ultrabreathable and Protective Membranes with Sub-5 nm Carbon Nanotube Pores. *Advanced Materials*, **2016**, 28, 5871-7	24	73
25	Salt Solutions in Carbon Nanotubes: The Role of CationInteractions. *Journal of Physical Chemistry C*, **2016**, 120, 7332-7338	3.8	57

24	Hierarchical reinforcement of randomly-oriented carbon nanotube mats by ion irradiation. *Carbon*, **2016**, 99, 491-501	10.4	4
23	Electrokinetics of scalable, electric-field-assisted fabrication of vertically aligned carbon-nanotube/polymer composites. *Journal of Applied Physics*, **2015**, 117, 214306	2.5	30
22	Giant Conductance and Anomalous Concentration Dependence in Sub-5 nm Carbon Nanotube Nanochannels. *Biophysical Journal*, **2015**, 108, 175a	2.9	5
21	Nanofluidic Transport through Isolated Carbon Nanotube Channels: Advances, Controversies, and Challenges. *Advanced Materials*, **2015**, 27, 5726-37	24	67
20	Fabrication of flexible, aligned carbon nanotube/polymer composite membranes by in-situ polymerization. *Journal of Membrane Science*, **2014**, 460, 91-98	9.6	84
19	Thermal and Structural Issues of Target Injection into a Laser-Driven Inertial Fusion Energy Chamber. *Fusion Science and Technology*, **2014**, 66, 343-348	1.1	3
18	Nanofluidic Carbon Nanotube Membranes **2014**, 173-188		2
17	Laser-assisted simultaneous transfer and patterning of vertically aligned carbon nanotube arrays on polymer substrates for flexible devices. *ACS Nano*, **2012**, 6, 7858-66	16.7	48
16	pH-tunable ion selectivity in carbon nanotube pores. *Langmuir*, **2010**, 26, 14848-53	4	90
15	Mechanism and kinetics of growth termination in controlled chemical vapor deposition growth of multiwall carbon nanotube arrays. *Nano Letters*, **2009**, 9, 738-44	11.5	92
14	Nanofluidic Carbon Nanotube Membranes: Applications for Water Purification and Desalination **2009**, 77-93		4
13	Ion exclusion by sub-2-nm carbon nanotube pores. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 17250-5	11.5	523
12	Mechanism of Ion Exclusion by Sub-2nm Carbon Nanotube Membranes. *Materials Research Society Symposia Proceedings*, **2008**, 1106, 1		7
11	Water diffusion through hydrogel membranes. *Journal of Membrane Science*, **2008**, 320, 423-430	9.6	17
10	Nanofluidics in carbon nanotubes. *Nano Today*, **2007**, 2, 22-29	17.9	963
9	Multicomponent Diffusion in Highly Asymmetric Systems. An Extended Maxwell�Stefan Model for Starkly Different-Sized, Segment-Accessible Chain Molecules. *Macromolecules*, **2005**, 38, 1364-1370	5.5	49
8	Glass-transition temperatures for soft-contact-lens materials. Dependence on water content. *Polymer*, **2005**, 46, 4845-4852	3.9	22
7	Steady-state diffusion of water through soft-contact-lens materials. *Biomaterials*, **2005**, 26, 5704-16	15.6	39

6	Diffusivity of water through a HEMA-based soft contact lens. *Fluid Phase Equilibria*, **2005**, 228-229, 269-273	2.5	15
5	Sorption and transport of water vapor in thin polymer films at 35 °C. *Physical Chemistry Chemical Physics*, **2004**, 6, 103-108	3.6	45
4	Solubilities and diffusivities of water vapor in poly(methylmethacrylate), poly(2-hydroxyethylmethacrylate), poly(N-vinyl-2-pyrrolidone) and poly(acrylonitrile). *Polymer*, **2003**, 44, 6323-6333	3.9	74
3	Vapor-Sorption Equilibria for 4-Vinylpyridine-Based Copolymer and Cross-Linked Polymer/Alcohol Systems. Effect of Intramolecular Repulsion. *Macromolecules*, **2000**, 33, 8435-8442	5.5	17
2	Molecular thermodynamics of precipitation. *Chemical Engineering and Processing: Process Intensification*, **1999**, 38, 463-475	3.7	13
1	Improving cubic EOSS near the critical point by a phase-space cell approximation. *AICHE Journal*, **1999**, 45, 906-915	3.6	11