Rahul Raveendran Nair

List of Publications by Year
in descending order

39 papers	16,740 citations	218677 26 h-index	289244 40 g-index
41 all docs	41 docs citations	41 times ranked	18738 citing authors

#	Article	IF	Citations
1	Control of Graphene's Properties by Reversible Hydrogenation: Evidence for Graphane. Science, 2009, 323, 610-613.	12.6	3,748
2	Unimpeded Permeation of Water Through Helium-Leakâ€“Tight Graphene-Based Membranes. Science, 2012, 335, 442-444.	12.6	2,552
3	Precise and Ultrafast Molecular Sieving Through Graphene Oxide Membranes. Science, 2014, 343, 752-754.	12.6	2,060
4	Uniaxial strain in graphene by Raman spectroscopy:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>G</mml:mi></mml:math>peak splitting, GrÃ¼neisen parameters, and sample orientation. Physical Review B, 2009, 79, .	3.2	1,662
5	Tunable sieving of ions using graphene oxide membranes. Nature Nanotechnology, 2017, 12, 546-550.	31.5	1,364
6	Fluorographene: A Twoâ€Dimensional Counterpart of Teflon. Small, 2010, 6, 2877-2884.	10.0	1,146
7	Proton transport through one-atom-thick crystals. Nature, 2014, 516, 227-230.	27.8	668
8	Square ice in graphene nanocapillaries. Nature, 2015, 519, 443-445.	27.8	602
9	Ultrathin graphene-based membrane with preciseÂmolecular sieving and ultrafast solventÂpermeation. Nature Materials, 2017, 16, 1198-1202.	27.5	549
10	Impermeable barrier films and protective coatings based on reduced graphene oxide. Nature Communications, 2014, 5, 4843.	12.8	508
11	Size effect in ion transport through angstrom-scale slits. Science, 2017, 358, 511-513.	12.6	418
12	Electrically controlled water permeation through graphene oxide membranes. Nature, 2018, 559, 236-240.	27.8	263
13	Graphene as a transparent conductive support for studying biological molecules by transmission electron microscopy. Applied Physics Letters, 2010, 97, .	3.3	138
14	Van der Waals pressure and its effect on trapped interlayer molecules. Nature Communications, 2016, 7, 12168.	12.8	137
15	Superconductivity in Ca-doped graphene laminates. Scientific Reports, 2016, 6, 23254.	3.3	109
16	Cation-controlled wetting properties of vermiculite membranes and its promise for fouling resistant oilâ€“water separation. Nature Communications, 2020, 11, 1097.	12.8	89
17	Probing Photoexcited Carriers in a Few-Layer MoS₂ Laminate by Time-Resolved Optical Pumpâ€“Terahertz Probe Spectroscopy. ACS Nano, 2015, 9, 12004-12010.	14.6	84
18	Graphene Oxide Dielectric Permittivity at GHz and Its Applications for Wireless Humidity Sensing. Scientific Reports, 2018, 8, 43.	3.3	81

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19	Formation of Monolayer Graphene by Annealing Sacrificial Nickel Thin Films. Journal of Physical Chemistry C, 2009, 113, 16565-16567.	3.1	68
20	Dependence of the shape of graphene nanobubbles on trapped substance. Nature Communications, 2017, 8, 15844.	12.8	65
21	Manifestation of ripples in freeâ€standing graphene in lattice images obtained in an aberrationâ€corrected scanning transmission electron microscope. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1117-1122.	1.8	59
22	Nanoscale electron diffraction and plasmon spectroscopy of single- and few-layer boron nitride. Physical Review B, 2012, 85, .	3.2	46
23	Atomically resolved imaging of highly ordered alternating fluorinated graphene. Nature Communications, 2014, 5, 4902.	12.8	42
24	Ion exchange in atomically thin clays and micas. Nature Materials, 2021, 20, 1677-1682.	27.5	40
25	Two-Dimensional Covalent Crystals by Chemical Conversion of Thin van der Waals Materials. Nano Letters, 2019, 19, 6475-6481.	9.1	32
26	Apparent Ferromagnetism in Exfoliated Ultrathin Pyrite Sheets. Journal of Physical Chemistry C, 2021, 125, 18927-18935.	3.1	30
27	Nanotopography of graphene. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2115-2119.	1.8	25
28	Monolayer alkali and transition-metal monoxides: MgO, CaO, MnO, and NiO. Physical Review B, 2017, 95, .	3.2	25
29	Circular dichroism of magnetophonon resonance in doped graphene. Physical Review B, 2012, 86, .	3.2	21
30	Photorefractive performances of a graphene-doped PATPD/7-DCST/ECZ composite. Journal of Materials Chemistry C, 2014, 2, 7639-7647.	5.5	20
31	STEM plasmon spectroscopy of free standing graphene. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2265-2269.	1.8	18
32	Self-Limiting Growth of Two-Dimensional Palladium between Graphene Oxide Layers. Nano Letters, 2019, 19, 4678-4683.	9.1	18
33	Structure of hydrogen-dosed graphene deduced from low electron energy loss characteristics and density functional calculations. Applied Physics Letters, 2010, 97, 253118.	3.3	13
34	Reply to: Random interstratification in hydrated graphene oxide membranes and implications for seawater desalination. Nature Nanotechnology, 2022, 17, 134-135.	31.5	5
35	Graphene Oxide: Purified Graphene Oxide Dispersions Lack In Vitro Cytotoxicity and In Vivo Pathogenicity (Adv. Healthcare Mater. 3/2013). Advanced Healthcare Materials, 2013, 2, 512-512.	7.6	4
36	Graphene-based membranes with limited swelling sieve common salts out of salty water. Membrane Technology, 2017, 2017, 7.	0.1	4

#	Article	IF	Citations
37	Single Isomer Heterometallic {Cr^{III}₆M^{II}₂} Rings Templated by Tetramethylammonium. Inorganic Chemistry, 2021, 60, 15675-15685.	4.0	2
38	Ultra-thin structures of manganese fluorides: conversion from manganese dichalcogenides by fluorination. Physical Chemistry Chemical Physics, 2021, 23, 10218-10224.	2.8	1
39	Ultrafast non-thermal electron dynamics in single layer graphene. , 2013, , .		0