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	Reply to: Random interstratification in hydrated graphene oxide membranes and implications for seawater desalination. Nature Nanotechnology, 2022, 17, 134-135.	31.5	5
2	Ultra-thin structures of manganese fluorides: conversion from manganese dichalcogenides by fluorination. Physical Chemistry Chemical Physics, 2021, 23, 10218-10224.	2.8	1
3	Ion exchange in atomically thin clays and micas. Nature Materials, 2021, 20, 1677-1682.	27.5	40
4	Apparent Ferromagnetism in Exfoliated Ultrathin Pyrite Sheets. Journal of Physical Chemistry C, 2021, 125, 18927-18935.	3.1	30
5	Single Isomer Heterometallic {Cr^{III}₆M^{II}₂} Rings Templated by Tetramethylammonium. Inorganic Chemistry, 2021, 60, 15675-15685.	4.0	2
6	Cation-controlled wetting properties of vermiculite membranes and its promise for fouling resistant oilâ€“water separation. Nature Communications, 2020, 11, 1097.	12.8	89
7	Two-Dimensional Covalent Crystals by Chemical Conversion of Thin van der Waals Materials. Nano Letters, 2019, 19, 6475-6481.	9.1	32
8	Self-Limiting Growth of Two-Dimensional Palladium between Graphene Oxide Layers. Nano Letters, 2019, 19, 4678-4683.	9.1	18
9	Graphene Oxide Dielectric Permittivity at GHz and Its Applications for Wireless Humidity Sensing. Scientific Reports, 2018, 8, 43.	3.3	81
10	Electrically controlled water permeation through graphene oxide membranes. Nature, 2018, 559, 236-240.	27.8	263
11	Dependence of the shape of graphene nanobubbles on trapped substance. Nature Communications, 2017, 8, 15844.	12.8	65
12	Tunable sieving of ions using graphene oxide membranes. Nature Nanotechnology, 2017, 12, 546-550.	31.5	1,364
13	Size effect in ion transport through angstrom-scale slits. Science, 2017, 358, 511-513.	12.6	418
14	Graphene-based membranes with limited swelling sieve common salts out of salty water. Membrane Technology, 2017, 2017, 7.	0.1	4
15	Ultrathin graphene-based membrane with preciseÂmolecular sieving and ultrafast solventÂpermeation. Nature Materials, 2017, 16, 1198-1202.	27.5	549
16	Monolayer alkali and transition-metal monoxides: MgO, CaO, MnO, and NiO. Physical Review B, 2017, 95, .	3.2	25
17	Van der Waals pressure and its effect on trapped interlayer molecules. Nature Communications, 2016, 7, 12168.	12.8	137
18	Superconductivity in Ca-doped graphene laminates. Scientific Reports, 2016, 6, 23254.	3.3	109

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19	Square ice in graphene nanocapillaries. Nature, 2015, 519, 443-445.	27.8	602
20	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
21	Proton transport through one-atom-thick crystals. Nature, 2014, 516, 227-230.	27.8	668
22	Precise and Ultrafast Molecular Sieving Through Graphene Oxide Membranes. Science, 2014, 343, 752-754.	12.6	2,060
23	Photorefractive performances of a graphene-doped PATPD/7-DCST/ECZ composite. Journal of Materials Chemistry C, 2014, 2, 7639-7647.	5.5	20
24	Atomically resolved imaging of highly ordered alternating fluorinated graphene. Nature Communications, 2014, 5, 4902.	12.8	42
25	Impermeable barrier films and protective coatings based on reduced graphene oxide. Nature Communications, 2014, 5, 4843.	12.8	508
26	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
27	Ultrafast non-thermal electron dynamics in single layer graphene. , 2013, , .		0
28	Circular dichroism of magnetophonon resonance in doped graphene. Physical Review B, 2012, 86, .	3.2	21
29	Nanoscale electron diffraction and plasmon spectroscopy of single- and few-layer boron nitride. Physical Review B, 2012, 85, .	3.2	46
30	Unimpeded Permeation of Water Through Helium-Leakâ€“Tight Graphene-Based Membranes. Science, 2012, 335, 442-444.	12.6	2,552
31	Fluorographene: A Twoâ€Dimensional Counterpart of Teflon. Small, 2010, 6, 2877-2884.	10.0	1,146
32	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
33	Graphene as a transparent conductive support for studying biological molecules by transmission electron microscopy. Applied Physics Letters, 2010, 97, .	3.3	138
34	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
35	Nanotopography of graphene. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2115-2119.	1.8	25
36	Control of Graphene's Properties by Reversible Hydrogenation: Evidence for Graphane. Science, 2009, 323, 610-613.	12.6	3,748

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37	Formation of Monolayer Graphene by Annealing Sacrificial Nickel Thin Films. Journal of Physical Chemistry C, 2009, 113, 16565-16567.	3.1	68
38	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
39	STEM plasmon spectroscopy of free standing graphene. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2265-2269.	1.8	18