Gianaurelio Cuniberti

List of Publications by Year
in descending order

496 papers	17,658 citations	12303 69 h-index	28224 105 g-index
506 all docs	506 docs citations	506 times ranked	20088 citing authors

#	Article	IF	Citations
1	Three-dimensional printing of hierarchical and tough mesoporous bioactive glass scaffolds with a controllable pore architecture, excellent mechanical strength and mineralization ability. Acta Biomaterialia, 2011, 7, 2644-2650.	4.1	324
2	Control of Thermal and Electronic Transport in Defect-Engineered Graphene Nanoribbons. ACS Nano, 2011, 5, 3779-3787.	7.3	320
3	Charge transport in disordered graphene-based low dimensional materials. Nano Research, 2008, 1, 361-394.	5.8	319
4	Direct Low-Temperature Nanographene CVD Synthesis over a Dielectric Insulator. ACS Nano, 2010, 4, 4206-4210.	7.3	311
5	Enhanced thermoelectric figure of merit in edge-disordered zigzag graphene nanoribbons. Physical Review B, 2010, 81, .	1.1	274
6	Application of silicene, germanene and stanene for Na or Li ion storage: A theoretical investigation. Electrochimica Acta, 2016, 213, 865-870.	2.6	245
7	Charge Transport in DNA-Based Devices. Topics in Current Chemistry, 2004, , 183-228.	4.0	227
8	Borophene as an anode material for Ca, Mg, Na or Li ion storage: A first-principle study. Journal of Power Sources, 2016, 329, 456-461.	4.0	211
9	Backbone-induced semiconducting behavior in shortDNAwires. Physical Review B, 2002, 65, .	1.1	195
10	Contact Dependence of Carrier Injection in Carbon Nanotubes: AnAbÂInitioStudy. Physical Review Letters, 2006, 96, 076802.	2.9	194
11	Spin-selective transport through helical molecular systems. Physical Review B, 2012, 85, .	1.1	194
12	Tuning the conductance of a molecular switch. Nature Nanotechnology, 2007, 2, 176-179.	15.6	188
13	Carbon nanostructures as multi-functional drug delivery platforms. Journal of Materials Chemistry B, 2013, 1, 401-428.	2.9	186
14	Multifunctional magnetic mesoporous bioactive glass scaffolds with a hierarchical pore structure. Acta Biomaterialia, 2011, 7, 3563-3572.	4.1	171
15	Fuel-Free Locomotion of Janus Motors: Magnetically Induced Thermophoresis. ACS Nano, 2013, 7, 1360-1367.	7.3	167
16	First-principles investigation of mechanical properties of silicene, germanene and stanene. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 87, 228-232.	1.3	158
17	Chirality-Dependent Electron Spin Filtering by Molecular Monolayers of Helicenes. Journal of Physical Chemistry Letters, 2018, 9, 2025-2030.	2.1	154
18	Efficient Calculation of Charge-Transfer Matrix Elements for Hole Transfer in DNA. Journal of Physical Chemistry B, 2008, 112, 7937-7947.	1.2	150

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19	Decacene: Onâ€Surface Generation. Angewandte Chemie - International Edition, 2017, 56, 11945-11948.	7.2	146
20	Electronic structure of single DNA molecules resolved by transverse scanning tunnelling spectroscopy. Nature Materials, 2008, 7, 68-74.	13.3	140
21	Coordination Polymer Framework Based Onâ€Chip Microâ€Supercapacitors with AC Lineâ€Filtering Performance. Angewandte Chemie - International Edition, 2017, 56, 3920-3924.	7.2	140
22	Graphene or h-BN paraffin composite structures for the thermal management of Li-ion batteries: A multiscale investigation. Applied Energy, 2017, 202, 323-334.	5.1	133
23	Engineering crystalline quasi-two-dimensional polyaniline thin film with enhanced electrical and chemiresistive sensing performances. Nature Communications, 2019, 10, 4225.	5.8	132
24	GITT Analysis of Lithium Insertion Cathodes for Determining the Lithium Diffusion Coefficient at Low Temperature: Challenges and Pitfalls. Journal of the Electrochemical Society, 2020, 167, 090546.	1.3	130
25	Graphene: Piecing it Together. Advanced Materials, 2011, 23, 4471-4490.	11.1	127
26	Reusability of photocatalytic TiO2 and ZnO nanoparticles immobilized in poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (	3.1	122
27	Synthesis and characterization of carbon nanowalls on different substrates by radio frequency plasma enhanced chemical vapor deposition. Carbon, 2014, 72, 372-380.	5.4	121
28	Synthesis of NBN-Type Zigzag-Edged Polycyclic Aromatic Hydrocarbons: 1,9-Diaza-9a-boraphenalene as a Structural Motif. Journal of the American Chemical Society, 2016, 138, 11606-11615.	6.6	121
29	In Situ Observations of Free-Standing Graphene-like Mono- and Bilayer ZnO Membranes. ACS Nano, 2015, 9, 11408-11413.	7.3	118
30	Vibrational modes and low-temperature thermal properties of graphene and carbon nanotubes: Minimal force-constant model. Physical Review B, 2008, 78, .	1.1	117
31	A bottom-up route to enhance thermoelectric figures of merit in graphene nanoribbons. Scientific Reports, 2013, 3, 1228.	1.6	117
32	Electron-beam induced synthesis of nanostructures: a review. Nanoscale, 2016, 8, 11340-11362.	2.8	116
33	Twoâ€Dimensional Boronate Ester Covalent Organic Framework Thin Films with Large Single Crystalline Domains for a Neuromorphic Memory Device. Angewandte Chemie - International Edition, 2020, 59, 8218-8224.	7.2	116
34	Dynamic and Electronic Transport Properties of DNA Translocation through Graphene Nanopores. Nano Letters, 2013, 13, 1969-1976.	4.5	115
35	Bioactive SrOâ€“SiO2 glass with well-ordered mesopores: Characterization, physiochemistry and biological properties. Acta Biomaterialia, 2011, 7, 1797-1806.	4.1	113
36	Mechanical properties and thermal conductivity of graphitic carbon nitride: A molecular dynamics study. Computational Materials Science, 2015, 99, 285-289.	1.4	112

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37	Highly Conductive Boron Nanotubes: Transport Properties, Work Functions, and Structural Stabilities. ACS Nano, 2011, 5, 4997-5005.	7.3	106
38	Toward Highly Sensitive and Energy Efficient Ammonia Gas Detection with Modified Single-Walled Carbon Nanotubes at Room Temperature. ACS Sensors, 2018, 3, 79-86.	4.0	106
39	Modeling Spin Transport in Helical Fields: Derivation of an Effective Low-Dimensional Hamiltonian. Journal of Physical Chemistry C, 2013, 117, 22276-22284.	1.5	103
40	Insight into doping efficiency of organic semiconductors from the analysis of the density of states in n-doped C60 and ZnPc. Nature Materials, 2018, 17, 439-444.	13.3	101
41	Impact of molecular quadrupole moments on the energy levels at organic heterojunctions. Nature Communications, 2019, 10, 2466.	5.8	101
42	Phonon Engineering in Carbon Nanotubes by Controlling Defect Concentration. Nano Letters, 2011, 11, 4971-4977.	4.5	99
43	Atomistic modeling of mechanical properties of polycrystalline graphene. Nanotechnology, 2014, 25, 215704.	1.3	99
44	Multiscale modeling of thermal conductivity of polycrystalline graphene sheets. Nanoscale, 2014, 6, 3344-3352.	2.8	98
45	Multimetallic Hierarchical Aerogels: Shape Engineering of the Building Blocks for Efficient Electrocatalysis. Advanced Materials, 2017, 29, 1605254.	11.1	98
46	Dodecacene Generated on Surface: Reopening of the Energy Gap. ACS Nano, 2020, 14, 1011-1017.	7.3	93
47	Engineering the figure of merit and thermopower in single-molecule devices connected to semiconducting electrodes. Physical Review B, 2010, 81, .	1.1	91
48	Electrical Conductance in Biological Molecules. Advanced Functional Materials, 2010, 20, 1865-1883.	7.8	90
49	Mechanical properties of polycrystalline boron-nitride nanosheets. RSC Advances, 2014, 4, 19137-19143.	1.7	90
50	A Stable Saddleâ€Shaped Polycyclic Hydrocarbon with an Openâ€Shell Singlet Ground State. Angewandte Chemie - International Edition, 2017, 56, 3280-3284.	7.2	90
51	Persulfurated Coronene: A New Generation of â€œSulflowerâ€• Journal of the American Chemical Society, 2017, 139, 2168-2171.	6.6	89
52	Synthesis of Vinyleneâ€Linked Twoâ€Dimensional Conjugated Polymers via the Hornerâ€“Wadsworthâ€“Emmons Reaction. Angewandte Chemie - International Edition, 2020, 59, 23620-23625.	7.2	86
53	Propagation scheme for nonequilibrium dynamics of electron transport in nanoscale devices. Physical Review B, 2009, 80, .	1.1	84
54	Effects of Al-doping on the properties of Liâ€“Mnâ€“Niâ€“O cathode materials for Li-ion batteries: an ab initio study. Journal of Materials Chemistry A, 2013, 1, 9273.	5.2	84

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55	Control over Janus micromotors by the strength of a magnetic field. Nanoscale, 2013, 5, 1332-1336.	2.8	84
56	Anisotropic Thermoelectric Response in Two-Dimensional Puckered Structures. Journal of Physical Chemistry C, 2016, 120, 18841-18849.	1.5	84
57	Understanding the catalyst-free transformation of amorphous carbon into graphene by current-induced annealing. Scientific Reports, 2013, 3, .	1.6	82
58	Photocatalytic degradation of pharmaceuticals present in conventional treated wastewater by nanoparticle suspensions. Journal of Environmental Chemical Engineering, 2016, 4, 287-292.	3.3	82
59	Theory of an all-carbon molecular switch. Physical Review B, 2002, 65, .	1.1	81
60	Synthesis of carbon nanotubes with and without catalyst particles. Nanoscale Research Letters, 2011, 6, 303.	3.1	81
61	Charge Transport through Biomolecular Wires in a Solvent: Bridging Molecular Dynamics and Model Hamiltonian Approaches. Physical Review Letters, 2009, 102, 208102.	2.9	80
62	Combined density functional theory and Landauer approach for hole transfer in DNA along classical molecular dynamics trajectories. Journal of Chemical Physics, 2009, 130, 215104.	1.2	78
63	High-Performance Three-Dimensional Tubular Nanomembrane Sensor for DNA Detection. Nano Letters, 2016, 16, 4288-4296.	4.5	78
64	TiO2/graphene oxide immobilized in P(VDF-TrFE) electrospun membranes with enhanced visible-light-induced photocatalytic performance. Journal of Materials Science, 2016, 51, 6974-6986.	1.7	76
65	A Chirality-Based Quantum Leap. ACS Nano, 2022, 16, 4989-5035.	7.3	74
66	Absorption Tails of Donor:C₆₀ Blends Provide Insight into Thermally Activated Charge-Transfer Processes and Polaron Relaxation. Journal of the American Chemical Society, 2017, 139, 1699-1704.	6.6	73
67	Nonequilibrium molecular vibrons: An approach based on the nonequilibrium Green function technique and the self-consistent Born approximation. Physical Review B, 2006, 73, .	1.1	72
68	Modeling extended contacts for nanotube and graphene devices. Physical Review B, 2008, 77, .	1.1	71
69	ac transport in graphene-based Fabry-PÃ©rot devices. Physical Review B, 2010, 81, .	1.1	70
70	Organometallic Complexes of Graphene: Toward Atomic Spintronics Using a Graphene Web. ACS Nano, 2011, 5, 9939-9949.	7.3	70
71	Theoretical Insight into Highâ€Efficiency Tripleâ€Junction Tandem Solar Cells via the Band Engineering of Antimony Chalcogenides. Solar Rrl, 2021, 5, 2000800.	3.1	70
72	Negative Photoconductance in Heavily Doped Si Nanowire Field-Effect Transistors. Nano Letters, 2017, 17, 6727-6734.	4.5	69

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73	Enhanced Magnetoresistance in Chiral Molecular Junctions. Journal of Physical Chemistry Letters, 2018, 9, 5453-5459.	2.1	69
74	Quantum Transport through a DNA Wire in a Dissipative Environment. Nano Letters, 2005, 5, 1093-1097.	4.5	68
75	Effects of domains in phonon conduction through hybrid boron nitride and graphene sheets. Physical Review B, 2011, 84, .	1.1	66
76	Inelastic quantum transport in a ladder model: Implications for DNA conduction and comparison to experiments on suspended DNA oligomers. Physical Review B, 2006, 74, .	1.1	65
77	Electrochemically Exfoliated Highâ€Quality 2Hâ€MoS₂ for Multiflake Thin Film Flexible Biosensors. Small, 2019, 15, e1901265.	5.2	65
78	Organic Zener Diodes: Tunneling across the Gap in Organic Semiconductor Materials. Nano Letters, 2010, 10, 4929-4934.	4.5	64
79	Coverage-Driven Electronic Decoupling of Fe-Phthalocyanine from a Ag(111) Substrate. Journal of Physical Chemistry C, 2011, 115, 12173-12179.	1.5	64
80	Exciton Binding Energy in Molecular Triads. Journal of Physical Chemistry C, 2017, 121, 17088-17095.	1.5	64
81	The catalytic potential of high-Îº dielectrics for graphene formation. Applied Physics Letters, 2011, 98, .	1.5	63
82	ac conductance of a quantum wire with electron-electron interactions. Physical Review B, 1998, 57, 1515-1526.	1.1	61
83	Silicon nanowires â€“ a versatile technology platform. Physica Status Solidi - Rapid Research Letters, 2013, 7, 793-799.	1.2	61
84	Applications of 2D-Layered Palladium Diselenide and Its van der Waals Heterostructures in Electronics and Optoelectronics. Nano-Micro Letters, 2021, 13, 143.	14.4	61
85	Determination of state of charge-dependent asymmetric Butlerâ€“Volmer kinetics for LixCoO2 electrode using GITT measurements. Journal of Power Sources, 2015, 299, 156-161.	4.0	60
86	Tetracene Formation by On-Surface Reduction. ACS Nano, 2016, 10, 4538-4542.	7.3	60
87	Dissipative effects in the electronic transport through DNA molecular wires. Physical Review B, 2005, 71, .	1.1	59
88	Hofstadter butterflies of bilayer graphene. Physical Review B, 2007, 75, .	1.1	59
89	Amorphous Carbon under 80 kV Electron Irradiation: A Means to Make or Break Graphene. Advanced Materials, 2012, 24, 5630-5635.	11.1	59
90	Ciprofloxacin wastewater treated by UVA photocatalysis: contribution of irradiated TiO₂and ZnO nanoparticles on the final toxicity as assessed by Vibrio fischeri. RSC Advances, 2016, 6, 95494-95503.	1.7	59

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91	Fewâ€Layer Graphene Kills Selectively Tumor Cells from Myelomonocytic Leukemia Patients. Angewandte Chemie - International Edition, 2017, 56, 3014-3019.	7.2	59
92	Enhancing single-parameter quantum charge pumping in carbon-based devices. Applied Physics Letters, 2011, 99, 092102.	1.5	58
93	Light Weight and Flexible Highâ€Performance Diagnostic Platform. Advanced Healthcare Materials, 2015, 4, 1517-1525.	3.9	58
94	Moving Nanostructures: Pulse-Induced Positioning of Supramolecular Assemblies. ACS Nano, 2013, 7, 191-197.	7.3	57
95	Filament Depolymerization by Motor Molecules. Physical Review Letters, 2005, 94, 108102.	2.9	56
96	Spin-valve effect in zigzag graphene nanoribbons by defect engineering. Physical Review B, 2009, 80, .	1.1	56
97	Modeling graphene-based nanoelectromechanical devices. Physical Review B, 2010, 81, .	1.1	56
98	A Dualâ€Stimuliâ€Responsive Sodiumâ€Bromine Battery with Ultrahigh Energy Density. Advanced Materials, 2018, 30, e1800028.	11.1	56
99	Highâ€Motility Visible Lightâ€Driven Ag/AgCl Janus Micromotors. Small, 2018, 14, e1803613.	5.2	56
100	Parallel arrays of Schottky barrier nanowire field effect transistors: Nanoscopic effects for macroscopic current output. Nano Research, 2013, 6, 381-388.	5.8	55
101	Reconstructing the Thermal Green FunctionsÂ¶at Real Times from Those at Imaginary Times. Communications in Mathematical Physics, 2001, 216, 59-83.	1.0	54
102	Single-crystalline CdTe nanowire field effect transistors as nanowire-based photodetector. Physical Chemistry Chemical Physics, 2014, 16, 22687-22693.	1.3	54
103	Towards an optimal contact metal for CNTFETs. Nanoscale, 2016, 8, 10240-10251.	2.8	54
104	Imaging the electronic structure of on-surface generated hexacene. Chemical Communications, 2017, 53, 1583-1586.	2.2	54
105	Decacene: Onâ€Surface Generation. Angewandte Chemie, 2017, 129, 12107-12110.	1.6	54
106	Hybrid Silicon Nanowire Devices and Their Functional Diversity. Advanced Science, 2019, 6, 1900522.	5.6	54
107	Structural fluctuations and quantum transport through DNA molecular wires: a combined molecular dynamics and model Hamiltonian approach. New Journal of Physics, 2010, 12, 023022.	1.2	53
108	Controlling the conductance and noise of driven carbon-based Fabryâ€“PÃ©rot devices. Applied Physics Letters, 2009, 94, .	1.5	52

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109	Structural stability versus conformational sampling in biomolecular systems: Why is the charge transfer efficiency in G4-DNA better than in double-stranded DNA?. Journal of Chemical Physics, 2010, 133, 035103.	1.2	52
110	Selection of a DNA aptamer against norovirus capsid protein VP1. FEMS Microbiology Letters, 2014, 351, 162-169.	0.7	52
111	Chemiresistive biosensors based on carbon nanotubes for label-free detection of DNA sequences derived from avian influenza virus H5N1. Sensors and Actuators B: Chemical, 2017, 249, 691-699.	4.0	52
112	Photocatalytic degradation of recalcitrant micropollutants by reusable Fe 3 O 4 /SiO 2 /TiO 2 particles. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 345, 27-35.	2.0	52
113	Straintronics in graphene: Extra large electronic band gap induced by tensile and shear strains. Journal of Applied Physics, 2019, 126, .	1.1	51
114	Hofstadter butterflies of carbon nanotubes: Pseudofractality of the magnetoelectronic spectrum. Physical Review B, 2006, 74, .	1.1	50
115	Engineering carbon chains from mechanically stretched graphene-based materials. Physical Review B, 2011, 83, .	1.1	50
116	Enhanced Photocatalytic Activity of Au/TiO2 Nanoparticles against Ciprofloxacin. Catalysts, 2020, 10, 234.	1.6	50
117	CVDâ€Grown Horizontally Aligned Singleâ€Walled Carbon Nanotubes: Synthesis Routes and Growth Mechanisms. Small, 2012, 8, 1973-1992.	5.2	49
118	Investigating the Outskirts of Fe and Co Catalyst Particles in Alumina-Supported Catalytic CVD Carbon Nanotube Growth. ACS Nano, 2010, 4, 1146-1152.	7.3	48
119	Disorder and dephasing effects on electron transport through conjugated molecular wires in molecular junctions. Physical Review B, 2012, 85, .	1.1	48
120	Materials Meets Concepts in Moleculeâ€Based Electronics. Advanced Functional Materials, 2015, 25, 1933-1954.	7.8	47
121	Nanowire sensors monitor bacterial growth kinetics and response to antibiotics. Lab on A Chip, 2017, 17, 4283-4293.	3.1	47
122	Efficient linear scaling method for computing the thermal conductivity of disordered materials. Physical Review B, 2011, 83, .	1.1	46
123	Contact effects in spin transport along double-helical molecules. Physical Review B, 2014, 89, .	1.1	46
124	Metamorphosis in carbon network: From penta-graphene to biphenylene under uniaxial tension. FlatChem, 2017, 1, 65-73.	2.8	46
125	Highly sensitive room temperature ammonia gas sensor using pristine graphene: The role of biocompatible stabilizer. Carbon, 2021, 173, 262-270.	5.4	46
126	Synthesis of Waferâ€Scale Graphene with Chemical Vapor Deposition for Electronic Device Applications. Advanced Materials Technologies, 2021, 6, 2000744.	3.0	46

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127	Dipole Assisted Photogated Switch in Spiropyran Grafted Polyaniline Nanowires. Journal of Physical Chemistry C, 2011, 115, 3123-3128.	1.5	45
128	Nucleobase adsorbed at graphene devices: Enhance bio-sensorics. Applied Physics Letters, 2012, 100, 063101.	1.5	45
129	Schottky barrier-based silicon nanowire pH sensor with live sensitivity control. Nano Research, 2014, 7, 263-271.	5.8	45
130	Graphene Biodevices for Early Disease Diagnosis Based on Biomarker Detection. ACS Sensors, 2021, 6, 3841-3881.	4.0	45
131	Chirality-Induced Spin Selectivity in a Coarse-Grained Tight-Binding Model for Helicene. Journal of Physical Chemistry C, 2019, 123, 27230-27241.	1.5	44
132	Epitaxial Growth of Vertically Aligned Antimony Selenide Nanorod Arrays for Heterostructure Based Selfâ€Powered Photodetector. Advanced Optical Materials, 2022, 10, .	3.6	44
133	Ultrasensitive detection of Ebola matrix protein in a memristor mode. Nano Research, 2018, 11, 1057-1068.	5.8	43
134	Fingerprints of mesoscopic leads in the conductance of a molecular wire. Chemical Physics, 2002, 281, 465-476.	0.9	42
135	Electronic Resonances and Gap Stabilization of Higher Acenes on a Gold Surface. ACS Nano, 2018, 12, 8506-8511.	7.3	42
136	Phonon transport in large scale carbon-based disordered materials: Implementation of an efficient order-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math>and real-space Kubo methodology. Physical Review B, 2010, 82, .	1.1	41
137	Orthogonal experimental design of titanium dioxideâ€"Poly(methyl methacrylate) electrospun nanocomposite membranes for photocatalytic applications. Journal of Environmental Chemical Engineering, 2016, 4, 3151-3158.	3.3	41
138	Green Function Techniques in the Treatment of Quantum Transport at the Molecular Scale. Springer Series in Chemical Physics, 2009, , 213-335.	0.2	40
139	Fully sp²â€Carbonâ€Linked Crystalline Twoâ€Dimensional Conjugated Polymers: Insight into 2D Poly(phenylenecyanovinylene) Formation and its Optoelectronic Properties. Chemistry - A European Journal, 2019, 25, 6562-6568.	1.7	40
140	Volatility in the Italian stock market: an empirical study. Physica A: Statistical Mechanics and Its Applications, 1999, 269, 148-155.	1.2	39
141	Conformation Dependence of DNA Exciton Parentage. Journal of Physical Chemistry B, 2009, 113, 10428-10435.	1.2	39
142	Pure-carbon ring transistor: Role of topology and structure. Applied Physics Letters, 2002, 81, 850-852.	1.5	38
143	Vibrational effects in the linear conductance of carbon nanotubes. Europhysics Letters, 2005, 71, 438-444.	0.7	38
144	Molecular junctions in the Coulomb blockade regime: Rectification and nesting. Physical Review B, 2007, 76, .	1.1	38

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145	In situ preparation and protein delivery of silicateâ€“alginate composite microspheres with core-shell structure. Journal of the Royal Society Interface, 2011, 8, 1804-1814.	1.5	38
146	Guanosine-based hydrogen-bonded 2D scaffolds: metal-free formation of G-quartet and G-ribbon architectures at the solid/liquid interface. Chemical Communications, 2015, 51, 11677-11680.	2.2	38
147	Electrical transport through a mechanically gated molecular wire. Physical Review B, 2011, 83, .	1.1	37
148	Diameter-Selective Dispersion of Carbon Nanotubes via Polymers: A Competition between Adsorption and Bundling. ACS Nano, 2015, 9, 9012-9019.	7.3	37
149	Compact Nanowire Sensors Probe Microdroplets. Nano Letters, 2016, 16, 4991-5000.	4.5	37
150	Electrochemical detection of ascorbic acid in artificial sweat using aÂflexible alginate/CuO-modified electrode. Mikrochimica Acta, 2020, 187, 520.	2.5	37
151	Intrinsic plasticity of silicon nanowire neurotransistors for dynamic memory and learning functions. Nature Electronics, 2020, 3, 398-408.	13.1	37
152	Plasmonic Biosensor Based on Vertical Arrays of Gold Nanoantennas. ACS Sensors, 2018, 3, 1392-1400.	4.0	36
153	Twoâ€Dimensional Boronate Ester Covalent Organic Framework Thin Films with Large Single Crystalline Domains for a Neuromorphic Memory Device. Angewandte Chemie, 2020, 132, 8295-8301.	1.6	36
154	Influence of side groups on the performance of infrared absorbing azaâ€BODIPY organic solar cells. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2747-2753.	0.8	35
155	Visible Light Actuated Efficient Exclusion Between Plasmonic Ag/AgCl Micromotors and Passive Beads. Small, 2018, 14, e1802537.	5.2	35
156	Role of Exchange Interactions in the Magnetic Response and Intermolecular Recognition of Chiral Molecules. Nano Letters, 2020, 20, 7077-7086.	4.5	35
157	Electron transport in nanotubeâ€“molecular-wire hybrids. Physical Review B, 2001, 63, .	1.1	34
158	Combined effect of strain and defects on the conductance of graphene nanoribbons. Physical Review B, 2013, 88, .	1.1	34
159	Efficient auxiliary-mode approach for time-dependent nanoelectronics. New Journal of Physics, 2016, 18, 093044.	1.2	34
160	Confined Catalytic Janus Swimmers in a Crowded Channel: Geometryâ€Driven Rectification Transients and Directional Locking. Small, 2016, 12, 5882-5890.	5.2	34
161	On-water surface synthesis of charged two-dimensional polymer single crystals via the irreversible Katritzky reaction. , 2022, 1, 69-76.		34
162	Correlated Tunneling in Intramolecular Carbon Nanotube Quantum Dots. Physical Review Letters, 2002, 89, 196402.	2.9	33

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163	Nonequilibrium resonant spectroscopy of molecular vibrons. Physical Review B, 2007, 76, .	1.1	33
164	Atomically Precise Prediction of 2D Selfâ€Assembly of Weakly Bonded Nanostructures: STM Insight into Concentrationâ€Dependent Architectures. Small, 2016, 12, 343-350.	5.2	33
165	Silicon-based molecular switch junctions. Nano Research, 2009, 2, 648-659.	5.8	32
166	Dielectrophoretic Growth of Metallic Nanowires and Microwires: Theory and Experiments. Langmuir, 2010, 26, 552-559.	1.6	32
167	Optoelectronic switching of nanowire-based hybrid organic/oxide/semiconductor field-effect transistors. Nano Research, 2015, 8, 1229-1240.	5.8	32
168	Magnetofluidic platform for multidimensional magnetic and optical barcoding of droplets. Lab on A Chip, 2015, 15, 216-224.	3.1	32
169	A structural insight into mechanical strength of graphene-like carbon and carbon nitride networks. Nanotechnology, 2017, 28, 055707.	1.3	32
170	Stimulation of bone formation by monocyte-activator functionalized graphene oxide in vivo. Nanoscale, 2019, 11, 19408-19421.	2.8	32
171	Two-Dimensional SiP, SiAs, GeP and GeAs as Promising Candidates for Photocatalytic Applications. Coatings, 2019, 9, 522.	1.2	32
172	Photocatalytic Microporous Membrane against the Increasing Problem of Water Emerging Pollutants. Materials, 2019, 12, 1649.	1.3	32
173	Supramolecular Rotor and Translator at Work: On-Surface Movement of Single Atoms. ACS Nano, 2015, 9, 8394-8400.	7.3	31
174	Scaling and Graphical Transport-Map Analysis of Ambipolar Schottky-Barrier Thin-Film Transistors Based on a Parallel Array of Si Nanowires. Nano Letters, 2015, 15, 4578-4584.	4.5	31
175	Tuning Near-Infrared Absorbing Donor Materials: A Study of Electronic, Optical, and Charge-Transport Properties of aza-BODIPYs. Chemistry of Materials, 2017, 29, 5525-5536.	3.2	31
176	Determining the Diffusion Coefficient of Lithium Insertion Cathodes from GITT measurements: Theoretical Analysis for low Temperatures**. ChemPhysChem, 2021, 22, 885-893.	1.0	30
177	Fermi Liquids and Luttinger Liquids. Springer Series in Solid-state Sciences, 2000, , 9-81.	0.3	29
178	The Puzzle of Contrast Inversion in DNA STM Imaging. Journal of Physical Chemistry B, 2005, 109, 14270-14274.	1.2	29
179	Controlled Stability of Molecular Junctions. Angewandte Chemie - International Edition, 2009, 48, 8273-8276.	7.2	29
180	Unveiling the Atomic Structure of Singleâ€Wall Boron Nanotubes. Advanced Functional Materials, 2014, 24, 4127-4134.	7.8	29

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181	Thermal bridging of graphene nanosheets via covalent molecular junctions: A non-equilibrium Greenâ€™s functionsâ€“density functional tight-binding study. Nano Research, 2019, 12, 791-799.	5.8	29
182	Graphene, other carbon nanomaterials and the immune system: toward nanoimmunity-by-design. JPhys Materials, 2020, 3, 034009.	1.8	29
183	Transport and elementary excitations of a Luttinger liquid. Journal of Physics Condensed Matter, 1996, 8, L21-L26.	0.7	28
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