Peter Liljeroth

List of Publications by Year
in descending order

112 papers	9,624 citations	41258 49 h-index	37111 96 g-index
120 all docs	120 docs citations	120 times ranked	10256 citing authors

#	Article	IF	Citations
1	The Chemical Structure of a Molecule Resolved by Atomic Force Microscopy. Science, 2009, 325, 1110-1114.	6.0	1,489
2	Current-Induced Hydrogen Tautomerization and Conductance Switching of Naphthalocyanine Molecules. Science, 2007, 317, 1203-1206.	6.0	621
3	Physicochemical Evaluation of the Hot-Injection Method, a Synthesis Route for Monodisperse Nanocrystals. Small, 2005, 1, 1152-1162.	5.2	438
4	Biphenylene network: A nonbenzenoid carbon allotrope. Science, 2021, 372, 852-856.	6.0	379
5	Ultra-narrow metallic armchair graphene nanoribbons. Nature Communications, 2015, 6, 10177.	5.8	359
6	Electrochemical Resolution of 15 Oxidation States for Monolayer Protected Gold Nanoparticles. Journal of the American Chemical Society, 2003, 125, 6644-6645.	6.6	331
7	Measuring the Charge State of an Adatom with Noncontact Atomic Force Microscopy. Science, 2009, 324, 1428-1431.	6.0	317
8	Charge transport through molecular switches. Journal of Physics Condensed Matter, 2010, 22, 133001.	0.7	250
9	Topological frustration induces unconventional magnetism in a nanographene. Nature Nanotechnology, 2020, 15, 22-28.	15.6	227
10	Electronic Coupling and Exciton Energy Transfer in CdTe Quantum-Dot Molecules. Journal of the American Chemical Society, 2006, 128, 10436-10441.	6.6	226
11	Topological states in engineered atomic lattices. Nature Physics, 2017, 13, 668-671.	6.5	225
12	Topological superconductivity in a van der Waals heterostructure. Nature, 2020, 588, 424-428.	13.7	211
13	Electron-conducting quantum dot solids: novel materials based on colloidal semiconductor nanocrystals. Chemical Society Reviews, 2005, 34, 299.	18.7	199
14	Suppression of electronâ€“vibron coupling in graphene nanoribbons contacted via a single atom. Nature Communications, 2013, 4, 2023.	5.8	177
15	Synthesis and Stability of Monolayer-Protected Au38 Clusters. Journal of the American Chemical Society, 2008, 130, 11049-11055.	6.6	168
16	Intermolecular Contrast in Atomic Force Microscopy Images without Intermolecular Bonds. Physical Review Letters, 2014, 113, 186102.	2.9	129
17	Molecular Self-Assembly on Graphene on SiO₂ and h-BN Substrates. Nano Letters, 2013, 13, 3199-3204.	4.5	117
18	Density of States Measured by Scanning-Tunneling Spectroscopy Sheds New Light on the Optical Transitions in PbSe Nanocrystals. Physical Review Letters, 2005, 95, 086801.	2.9	113

#	Article	IF	Citations
19	Quantised charging of monolayer-protected nanoparticles. Chemical Society Reviews, 2008, 37, 1836.	18.7	108
20	Quantitative Atomic Resolution Force Imaging on Epitaxial Graphene with Reactive and Nonreactive AFM Probes. ACS Nano, 2012, 6, 10216-10221.	7.3	104
21	Quantum-Confined Electronic States in Atomically Well-Defined Graphene Nanostructures. Physical Review Letters, 2011, 107, 236803.	2.9	100
22	Coherent electronâ€“nuclear coupling in oligothiophene molecular wires. Nature Physics, 2010, 6, 975-979.	6.5	98
23	Electronic components embedded in a single graphene nanoribbon. Nature Communications, 2017, 8, 119.	5.8	96
24	Quantitative Atomic Force Microscopy with Carbon Monoxide Terminated Tips. Physical Review Letters, 2011, 106, 046104.	2.9	93
25	Molecular assembly on two-dimensional materials. Nanotechnology, 2017, 28, 082001.	1.3	92
26	Templated Self-Assembly and Local Doping of Molecules on Epitaxial Hexagonal Boron Nitride. ACS Nano, 2013, 7, 11121-11128.	7.3	90
27	Precursor Geometry Determines the Growth Mechanism in Graphene Nanoribbons. Journal of Physical Chemistry C, 2017, 121, 2896-2904.	1.5	89
28	Epitaxial hexagonal boron nitride on Ir(111): A work function template. Physical Review B, 2014, 89, .	1.1	85
29	Coupled Yuâ€“Shibaâ€“Rusinov States in Molecular Dimers on NbSe₂. Nano Letters, 2018, 18, 2311-2315.	4.5	83
30	Variable Orbital Coupling in a Two-Dimensional Quantum-Dot Solid Probed on a Local Scale. Physical Review Letters, 2006, 97, 096803.	2.9	81
31	Electronic States at the Grapheneâ€“Hexagonal Boron Nitride Zigzag Interface. Nano Letters, 2014, 14, 5128-5132.	4.5	79
32	Size-dependent single-particle energy levels and interparticle Coulomb interactions in CdSe quantum dots measured by scanning tunneling spectroscopy. Physical Review B, 2006, 73, .	1.1	76
33	Single-Molecule Synthesis and Characterization of Metalâ^'Ligand Complexes by Low-Temperature STM. Nano Letters, 2010, 10, 2475-2479.	4.5	76
34	Self-Assembly of Cobalt-Phthalocyanine Molecules on Epitaxial Graphene on Ir(111). Journal of Physical Chemistry C, 2012, 116, 20433-20437.	1.5	74
35	Automated structure discovery in atomic force microscopy. Science Advances, 2020, 6, eaay6913.	4.7	71
36	Artificial heavy fermions in a van der Waals heterostructure. Nature, 2021, 599, 582-586.	13.7	69

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37	Two-Dimensional Band Structure in Honeycomb Metalâ€“Organic Frameworks. Nano Letters, 2018, 18, 5596-5602.	4.5	66
38	Electron Transport in Two-Dimensional Arrays of Gold Nanocrystals Investigated by Scanning Electrochemical Microscopy. Journal of the American Chemical Society, 2004, 126, 7126-7132.	6.6	64
39	Orbital and Charge-Resolved Polaron States in CdSe Dots and Rods Probed by Scanning Tunneling Spectroscopy. Physical Review Letters, 2009, 102, 196401.	2.9	64
40	Many-body transitions in a single molecule visualized by scanning tunnelling microscopy. Nature Physics, 2015, 11, 229-234.	6.5	63
41	Structure and local variations of the graphene moirÃ© on Ir(111). Physical Review B, 2013, 88, .	1.1	57
42	Can scanning tunnelling spectroscopy measure the density of states of semiconductor quantum dots?. Physical Chemistry Chemical Physics, 2006, 8, 3845.	1.3	56
43	Sample Corrugation Affects the Apparent Bond Lengths in Atomic Force Microscopy. ACS Nano, 2014, 8, 3006-3014.	7.3	54
44	Disk-Generation/Ring-Collection Scanning Electrochemical Microscopy:Â Theory and Application. Analytical Chemistry, 2002, 74, 1972-1978.	3.2	53
45	Micro ringâ€“disk electrode probes for scanning electrochemical microscopy. Electrochemistry Communications, 2002, 4, 67-71.	2.3	53
46	Controlling quantum dot emission by plasmonic nanoarrays. Optics Express, 2015, 23, 28206.	1.7	53
47	Observation of Coexistence of Yu-Shiba-Rusinov States and Spin-Flip Excitations. Nano Letters, 2019, 19, 4614-4619.	4.5	53
48	Self-Assembly and Orbital Imaging of Metal Phthalocyanines on a Graphene Model Surface. Journal of Physical Chemistry C, 2014, 118, 13320-13325.	1.5	52
49	Charge-Transfer-Driven Nonplanar Adsorption of F₄TCNQ Molecules on Epitaxial Graphene. ACS Nano, 2017, 11, 4960-4968.	7.3	51
50	Electronic states in finite graphene nanoribbons: Effect of charging and defects. Physical Review B, 2013, 88, .	1.1	49
51	Electrodeposition at polarisable liquid|liquid interfaces: The role of interfacial tension on nucleation kinetics. Physical Chemistry Chemical Physics, 2002, 4, 1067-1071.	1.3	47
52	Single-molecule chemistry and physics explored by low-temperature scanning probe microscopy. Chemical Communications, 2011, 47, 9011.	2.2	46
53	Topographic and electronic contrast of the graphene moirÃ© on Ir(111) probed by scanning tunneling microscopy and noncontact atomic force microscopy. Physical Review B, 2011, 83, .	1.1	46
54	Membrane activity of ionisable drugs â€“ a task for liquidâ€“liquid electrochemistry?. Electrochemistry Communications, 2003, 5, 473-479.	2.3	45

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55	Scanning Tunneling Spectroscopy of Individual PbSe Quantum Dots and Molecular Aggregates Stabilized in an Inert Nanocrystal Matrix. ACS Nano, 2008, 2, 600-606.	7.3	45
56	Electrochemistry at Lipid Monolayer-Modified Liquidâ˜Liquid Interfaces as an Improvement to Drug Partitioning Studies. Journal of Physical Chemistry B, 2001, 105, 10884-10892.	1.2	43
57	Interfacial Reactivity of Monolayer-Protected Clusters Studied by Scanning Electrochemical Microscopy. Journal of the American Chemical Society, 2002, 124, 12915-12921.	6.6	39
58	Probing Conductivity of Polyelectrolyte/Nanoparticle Composite Films by Scanning Electrochemical Microscopy. Nano Letters, 2003, 3, 1459-1462.	4.5	39
59	Temperature-Dependent Emission of Monolayer-Protected Au₃₈ Clusters. Journal of Physical Chemistry C, 2010, 114, 16025-16028.	1.5	38
60	Electronic and Magnetic Characterization of Epitaxial CrBr₃ Monolayers on a Superconducting Substrate. Advanced Materials, 2021, 33, e2006850.	11.1	38
61	Flexible Self-Assembled Molecular Templates on Graphene. Journal of Physical Chemistry C, 2016, 120, 8772-8780.	1.5	37
62	Elemental Identification by Combining Atomic Force Microscopy and Kelvin Probe Force Microscopy. ACS Nano, 2018, 12, 5274-5283.	7.3	37
63	Scanning probe microscopy and spectroscopy of colloidal semiconductor nanocrystals and assembled structures. Chemical Reviews, 2016, 116, 11181-11219.	23.0	34
64	Synthesis of Extended Atomically Perfect Zigzag Graphene - Boron Nitride Interfaces. Scientific Reports, 2015, 5, 16741.	1.6	33
65	Engineered electronic states in atomically precise artificial lattices and graphene nanoribbons. Advances in Physics: X, 2019, 4, 1651672.	1.5	33
66	Tuneable topological domain wall states in engineered atomic chains. Npj Quantum Materials, 2020, 5, .	1.8	33
67	Scanning Tunnelling Spectroscopy on Arrays of CdSe Quantum Dots: Response of Wave Functions to Local Electric Fields. Nano Letters, 2008, 8, 4014-4019.	4.5	32
68	Flipping a single proton switch. Nature Nanotechnology, 2012, 7, 5-6.	15.6	31
69	Langmuirâ˜Blodgett Monolayers at a Liquidâ˜Liquid Interface. Langmuir, 2000, 16, 6667-6673.	1.6	30
70	Designer flat bands in quasi-one-dimensional atomic lattices. Physical Review Research, 2020, 2, .	1.3	30
71	Hole-Induced Electron Transport through Coreâ˜Shell Quantum Dots: A Direct Measurement of the Electronâ˜Hole Interaction. Nano Letters, 2010, 10, 1931-1935.	4.5	29
72	Synthesis and Properties of Monolayer MnSe with Unusual Atomic Structure and Antiferromagnetic Ordering. ACS Nano, 2021, 15, 13794-13802.	7.3	28

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73	Dissolution testing of acetylsalicylic acid by a channel flow methodâ€"correlation to USP basket and intrinsic dissolution methods. European Journal of Pharmaceutical Sciences, 2003, 19, 395-401.	1.9	26
74	Electrochemical Characterization of Polyelectrolyte Multilayers Deposited at Liquidâ^'Liquid Interfaces. Langmuir, 2003, 19, 1287-1294.	1.6	26
75	Flux closure in two-dimensional magnetite nanoparticle assemblies. Physical Review B, 2006, 73, .	1.1	26
76	Structural manipulation of the graphene/metal interface with Ar<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mo>+</mml:mo></mml:msup></mml:math>irradiation. Physical Review B, 2013, 88, .	1.1	26
77	MoirÃ©-Enabled Topological Superconductivity. Nano Letters, 2022, 22, 328-333.	4.5	26
78	Two-Phase Oxidation of C60- by Molecular Oxygen at the Electrified Liquidâ^'Liquid Interface. Langmuir, 2003, 19, 5121-5127.	1.6	24
79	Charge injection and lateral conductivity in monolayers of metallic nanoparticles. Chemical Communications, 2003, , 1570.	2.2	24
80	Electron-phonon coupling and intervalley splitting determine the linewidth of single-electron transport through PbSe nanocrystals. Journal of Chemical Physics, 2009, 131, 224510.	1.2	24
81	Electronic and magnetic characterization of epitaxial VSe2 monolayers on superconducting NbSe2. Communications Physics, 2020, 3, .	2.0	24
82	Synthesis and Local Probe Gating of a Monolayer Metalâ€Organic Framework. Advanced Functional Materials, 2021, 31, 2100519.	7.8	18
83	Automated tip functionalization via machine learning in scanning probe microscopy. Computer Physics Communications, 2022, 273, 108258.	3.0	17
84	Ion Limited Charging of Nanoparticle Thin Films. Journal of Physical Chemistry C, 2008, 112, 15637-15642.	1.5	15
85	Channel flow at an immobilised liquid|liquid interface. Journal of Electroanalytical Chemistry, 2000, 483, 37-46.	1.9	14
86	Electrochemical Gating in Scanning Electrochemical Microscopy. Journal of Physical Chemistry C, 2008, 112, 2724-2728.	1.5	13
87	Dynamic Interfacial Tension at Electrified Liquid/Liquid Interfaces. Langmuir, 2002, 18, 8318-8323.	1.6	12
88	Chemisorption Determines the Photovoltage of a Ti/TiO2/Au/Dye Internal Electron Emission Photovoltaic Cell. Journal of Physical Chemistry B, 2005, 109, 9205-9208.	1.2	12
89	Benchmarking van der Waals-treated DFT: The case of hexagonal boron nitride and graphene on Ir(111). Physical Review Materials, 2019, 3, .	0.9	12
90	Two-Dimensional Metalâ€"Organic Framework on Superconducting NbSe₂. ACS Nano, 2021, 15, 17813-17819.	7.3	12

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91	Resolving Electron Transfer Kinetics at the Nanocrystal/Solution Interface. Journal of the American Chemical Society, 2006, 128, 4922-4923.	6.6	11
92	Single- and many-particle description of scanning tunneling spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 2017, 219, 63-71.	0.8	11
93	Order from a Mess: The Growth of 5-Armchair Graphene Nanoribbons. ACS Nano, 2021, 15, 16552-16561.	7.3	11
94	Electrostatic Discovery Atomic Force Microscopy. ACS Nano, 2022, 16, 89-97.	7.3	11
95	Confinement-Engineered Superconductor to Correlated-Insulator Transition in a van der Waals Monolayer. Nano Letters, 2022, 22, 1845-1850.	4.5	11
96	Mixed Self-Assembled Monolayers of Semirigid Tetrahydro-4H-thiopyran End-Capped Oligo(cyclohexylidenes). Langmuir, 2005, 21, 10497-10503.	1.6	9
97	Onâ€Surface Assembly of Auâ€Dicyanoanthracene Coordination Structures on Au(111). ChemPhysChem, 2019, 20, 2297-2300.	1.0	9
98	Electronic Characterization of a Charge-Transfer Complex Monolayer on Graphene. ACS Nano, 2021, 15, 9945-9954.	7.3	9
99	Lipophilicity of ions electrogenerated at a Pt coated micropipette supported liquidâ€“liquid interface. Electrochemistry Communications, 2002, 4, 255-259.	2.3	8
100	Measurement of the Adsorption of Drug Ions at Model Membranes by Scanning Electrochemical Microscopy. Langmuir, 2003, 19, 2851-2858.	1.6	6
101	Channel Flow Configuration for Studying the Kinetics of Surfactantâ^'Polyelectrolyte Binding. Analytical Chemistry, 2005, 77, 6895-6901.	3.2	6
102	Field-Emission Resonances on Graphene on Insulators. Journal of Physical Chemistry C, 2015, 119, 23951-23954.	1.5	6
103	Integrating Bayesian Inference with Scanning Probe Experiments for Robust Identification of Surface Adsorbate Configurations. Advanced Functional Materials, 2021, 31, 2010853.	7.8	6
104	Membrane activity of biotechnological peptide drugs. Chemical Communications, 2003, , 1430.	2.2	4
105	Knowing your neighbours. Nature Chemistry, 2014, 6, 8-10.	6.6	3
106	Atomic-Scale Contrast Formation in AFM Images on Molecular Systems. Nanoscience and Technology, 2015, , 173-194.	1.5	3
107	Muonium in nano-crystalline IIâ€“VI semiconductors. Physica B: Condensed Matter, 2009, 404, 837-840.	1.3	2
108	A layered unconventional superconductor. Nature Physics, 0, , .	6.5	1

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109	Electron-Conducting Quantum Dot Solids: Novel Materials Based on Colloidal Semiconductor Nanocrystals. ChemInform, 2005, 36, no.	0.1	0
110	Scanning Probe Microscopy and Spectroscopy. , 2014, , 223-255.		0
111	Integrating Bayesian Inference with Scanning Probe Experiments for Robust Identification of Surface Adsorbate Configurations (Adv. Funct. Mater. 32/2021). Advanced Functional Materials, 2021, 31, 2170235.	7.8	0
112	Reply to: â€œTopological and trivial domain wall states in engineered atomic chainsâ€• Npj Quantum Materials, 2022, 7, .	1.8	0