Xavier Bouju

List of Publications by Year
in descending order

62 papers	1,451 citations	331670 21 h-index	330143 37 g-index
62 all docs	62 docs citations	62 times ranked	1656 citing authors

#	Article	IF	Citations
1	Rolling a single molecular wheel at the atomic scale. Nature Nanotechnology, 2007, 2, 95-98.	31.5	177
2	Bicomponent Supramolecular Architectures at the Vacuumâ€“Solid Interface. Chemical Reviews, 2017, 117, 1407-1444.	47.7	95
3	Adsorption ofC60molecules. Physical Review B, 1996, 53, 1622-1629.	3.2	83
4	Coupled electromagnetic modes between a corrugated surface and a thin probe tip. Journal of Chemical Physics, 1991, 95, 2056-2064.	3.0	63
5	Single-atom motion during a lateral STM manipulation. Physical Review B, 1999, 59, R7845-R7848.	3.2	60
6	Selfâ€Assembly of Fivefoldâ€Symmetric Molecules on a Threefoldâ€Symmetric Surface. Angewandte Chemie - International Edition, 2009, 48, 1970-1973.	13.8	56
7	Manipulating the Conformation of Single Organometallic Chains on Au(111). Journal of Physical Chemistry C, 2014, 118, 1719-1728.	3.1	54
8	Self-consistent study of dynamical and polarization effects in near-field optical microscopy. Journal of the Optical Society of America B: Optical Physics, 1992, 9, 298.	2.1	53
9	van der Waals atomic trap in a scanning-tunneling-microscope junction:Tip shape, dynamical effects, and tunnel current signatures. Physical Review B, 1997, 55, 16498-16498.	3.2	48
10	Supramolecular Architectures on Surfaces Formed through Hydrogen Bonding Optimized in Three Dimensions. ACS Nano, 2010, 4, 4097-4109.	14.6	48
11	Recording the intramolecular deformation of a 4-legs molecule during its STM manipulation on a Cu(211) surface. Chemical Physics Letters, 2005, 402, 180-185.	2.6	42
12	Nonisotropic Selfâ€Assembly of Nanoparticles: From Compact Packing to Functional Aggregates. Advanced Materials, 2018, 30, e1706558.	21.0	38
13	Atomic radiation rates in photonic crystals. Physical Review B, 2001, 64, .	3.2	35
14	From zero to two dimensions: supramolecular nanostructures formed from perylene-3,4,9,10-tetracarboxylic diimide (PTCDI) and Ni on the Au(111) surface through the interplay between hydrogen-bonding and electrostatic metal-organic interactions. Nano Research, 2012, 5, 903-916.	10.4	31
15	Imaging and moving a xenon atom on a copper (110) surface with the tip of a scanning tunneling microscope: A theoretical study. Physical Review B, 1993, 47, 7454-7461.	3.2	29
16	STM manipulation of molecular moulds on metal surfaces. Nano Research, 2009, 2, 254-259.	10.4	29
17	Mechanics of(Xe)Natomic chains under STM manipulation. Physical Review B, 2001, 63, .	3.2	28
18	Self-assembly of enantiopure domains: The case of indigo on Cu(111). Journal of Chemical Physics, 2010, 132, 074705.	3.0	27

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19	Theoretical study of the atomic-force-microscopy imaging process on the NaCl(001) surface. Journal of Chemical Physics, 1998, 108, 359-367.	3.0	25
20	Molecular Self-Assembly of Jointed Molecules on a Metallic Substrate: From Single Molecule to Monolayer. ChemPhysChem, 2006, 7, 1917-1920.	2.1	22
21	Self-assembly of hydrogen-bonded chains of molecular landers. Chemical Communications, 2010, 46, 5545.	4.1	21
22	Adsorption and STM imaging of polycyclic aromatic hydrocarbons on graphene. Physical Review B, 2015, 91, .	3.2	21
23	Roomâ€Temperature Electronic Template Effect of the SmSi(111)â€8Ã—2 Interface for Selfâ€Alignment of Organic Molecules. ChemPhysChem, 2008, 9, 1437-1441.	2.1	20
24	Directional molecular sliding at room temperature on a silicon runway. Nanoscale, 2013, 5, 7005.	5.6	20
25	Atomic force microscope measurements and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">LCAO</mml:mi><mml:mo>â^'</mml:mo><mml:msup><mml:mi>S</mml:mi><mml:mrow><mml:mn>2</mml:mn> <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo>+</mml:mo></mml:mrow></mml:math>â€‰vdW calculations of contact length between a carbon nanotube and a graphene surface. Physical Review B, 2011, 83, .	3.2	19
26	Interactive physically-based structural modeling of hydrocarbon systems. Journal of Computational Physics, 2012, 231, 2581-2598.	3.8	19
27	Moving gold atoms with an atomic-force-microscope tip: A study of dimer and trimer formation on NaCl(100). Physical Review B, 1994, 50, 7893-7902.	3.2	16
28	The resistance of a (Xe) n atomic wire. Europhysics Letters, 1997, 38, 97-102.	2.0	16
29	Transmission scanning near-field optical microscopy with uncoated silicon tips. Ultramicroscopy, 1998, 71, 371-377.	1.9	16
30	Experimental investigation of resonance curves in dynamic force microscopy. Nanotechnology, 2003, 14, 1036-1042.	2.6	16
31	Synthesis and Characterization of a Series of Ruthenium Tris(Î²-diketonato) Complexes by an UHV-STM Investigation and Numerical Calculations. European Journal of Inorganic Chemistry, 2011, 2011, 2698-2705.	2.0	16
32	Van der Waals interactions between an adsorbate and the tip of an STM. Chemical Physics, 1992, 168, 203-210.	1.9	15
33	Graphite, graphene on SiC, and graphene nanoribbons: Calculated images with a numerical FM-AFM. Beilstein Journal of Nanotechnology, 2012, 3, 301-311.	2.8	14
34	Switching the Spin on a Ni Trimer within a Metalâ€“Organic Motif by Controlling the On-Top Bromine Atom. ACS Nano, 2019, 13, 9936-9943.	14.6	14
35	Glass and silicon probes: A comparative theoretical study for near-field optical microscopy. Journal of Applied Physics, 1998, 84, 52-57.	2.5	12
36	UHV-STM Investigations and Numerical Calculations of a Ruthenium Î²-Diketonato Complex with Protected Ethynyl Ligand: [Ru(dbm)₂(acac-TIPSA)]. Journal of Physical Chemistry C, 2012, 116, 13715-13721.	3.1	12

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37	Theoretical atomic-force-microscopy study of adsorbed fullerene molecules. Physical Review B, 1993, 48, 15417-15424.	3.2	11
38	Exploring the transferability of large supramolecular assemblies to the vacuum-solid interface. Nano Research, 2009, 2, 535-542.	10.4	11
39	Properties of Penta-tert-butylcorannulene Molecules Inserted in Phthalocyanine Networks Studied by Low-Temperature Scanning Tunneling Microscopy. Journal of Physical Chemistry C, 2009, 113, 21169-21176.	3.1	11
40	Scanning force microscopy simulations of well-characterized nanostructures on dielectric and semiconducting substrates. Applied Surface Science, 1998, 125, 351-359.	6.1	10
41	Size and Shape Effects on Electronic Energy Levels: From Infinite to Nanoscopic Systems in Three-Dimensional Space. Physica Status Solidi (B): Basic Research, 2000, 217, 819-832.	1.5	8
42	Fibonacci, Koch, and Penrose Structures: Spectrum of Finite Subsystems in Three-Dimensional Space. Physica Status Solidi (B): Basic Research, 2001, 225, 95-114.	1.5	8
43	Atomic diffusion inside a STM junction: simulations by kinetic Monte Carlo coupled to tunneling current calculations. Surface Science, 2003, 523, 267-278.	1.9	8
44	Self-consistent study of the electromagnetic coupling between a thin probe tip and a surface: implication for atomic-force and near-field microscopy. Ultramicroscopy, 1992, 42-44, 430-436.	1.9	7
45	Scattering of electromagnetic waves by silicon-nitride tips. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 816.	1.6	7
46	Influence of Halogen Bonds on the Compactness of Supramolecular Assemblies on Si(111)-B. Journal of Physical Chemistry C, 2017, 121, 8427-8434.	3.1	7
47	Influence of Cu adatoms on the molecular assembly of 4,4â€²-bipyridine on Cu(111). Physical Chemistry Chemical Physics, 2018, 20, 15350-15357.	2.8	7
48	Electric field effect and atomic manipulation process with the probe tip of a scanning tunneling microscope. Applied Physics A: Materials Science and Processing, 1998, 66, S749-S752.	2.3	6
49	An experimental investigation of resonance curves on metallic surfaces in dynamic force microscopy: the influence of frozen versus mobile charges. Nanotechnology, 2004, 15, S24-S29.	2.6	6
50	Bicomponent hydrogen-bonded nanostructures formed by two complementary molecular Landers on Au(111). Chemical Communications, 2014, 50, 10619-10621.	4.1	6
51	Adsorption of single 1,8-octanedithiol molecules on Cu(100). Physical Chemistry Chemical Physics, 2016, 18, 27521-27528.	2.8	6
52	Structural and electronic properties of hexa-adamantyl-hexa-phenylbenzene molecules studied by low temperature scanning tunneling microscopy. Surface Science, 2012, 606, 444-449.	1.9	4
53	Adsorption of Terarylenes on Ag(111) and NaCl(001)/Ag(111): A Scanning Tunneling Microscopy and Density Functional Theory Study. Journal of Physical Chemistry C, 2018, 122, 5978-5991.	3.1	4
54	Edge-On Self-Assembly of Tetra-bromoanthracenyl-porphyrin on Silver Surfaces. Journal of Physical Chemistry C, 2020, 124, 22137-22142.	3.1	3

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55	Surface Vacancy Generation by STM Tunneling Electrons in the Presence of Indigo Molecules on Cu(111). Journal of Physical Chemistry C, 2022, 126, 14103-14115.	3.1	3
56	Theoretical study of the resistance of short (Xe) n wires within an STM junction: the (Xe) 2 case. Applied Physics A: Materials Science and Processing, 1998, 66, S875-S878.	2.3	2
57	Image simulation of a corrugated surface in the constant-force-gradient mode of the scanning force microscope. Journal Physics D: Applied Physics, 1998, 31, 2388-2394.	2.8	2
58	Spectroscopie local d'une surface par dÃ©tection de champ proche : Ã©tude thÃ©orique comparative des mÃ©taux nobles. Journal De Physique, I, 1992, 2, 1431-1444.	1.2	2
59	Toward interactive scanning tunneling microscopy simulations of large-scale molecular systems in real time. Journal of Applied Physics, 2018, 124, .	2.5	1
60	Three-dimensional hydrogen bonding between Landers and planar molecules facilitated by electrostatic interactions with Ni adatoms. Chemical Communications, 2018, 54, 8845-8848.	4.1	1
61	‹title›Photon emission rates in photonic band-gap materials‹/title›. , 2002, 4655, 288.		0
62	Unraveling the molecular conformations of a single ruthenium complex adsorbed on the Ag(111) surface by calculations. Physical Chemistry Chemical Physics, 2019, 21, 10022-10027.	2.8	0