Ivan Stich

List of Publications by Year
in descending order

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42 papers	1,279 citations	489802 18 h-index	388640 36 g-index
42 all docs	42 docs citations	42 times ranked	1542 citing authors

#	Article	IF	Citations
1	Charge State Tristability of Oxygen Adatom on a Rutile TiO₂(110)â€“(1 Ã— 1) Surface Controlled by Atomic Force Microscopy. Journal of Physical Chemistry C, 2022, 126, 5064-5069.	1.5	4
2	Electron dynamics of tip-tunable oxygen species on TiO2 surface. Communications Materials, 2021, 2, .	2.9	10
3	Structure and Properties of Heavily B and P Codoped Amorphous Silicon Quantum Dots. Journal of Physical Chemistry C, 2021, 125, 23267-23274.	1.5	1
4	Voltage- and Redox State-Triggered Oxygen Adatom Conductance Switch. Journal of Physical Chemistry C, 2021, 125, 26801-26807.	1.5	2
5	Unraveling the Charge States of Au Nanoclusters on an Oxygen-Rich Rutile TiO₂(110) Surface and Their Triboelectrification Overturn by nc-AFM and KPFM. Journal of Physical Chemistry C, 2021, 125, 27607-27614.	1.5	4
6	Imaging the surface potential at the steps on the rutile TiO₂(110) surface by Kelvin probe force microscopy. Beilstein Journal of Nanotechnology, 2019, 10, 1228-1236.	1.5	10
7	Tip-Induced Control of Charge and Molecular Bonding of Oxygen Atoms on the Rutile TiO₂ (110) Surface with Atomic Force Microscopy. ACS Nano, 2019, 13, 6917-6924.	7.3	35
8	Many-Body Quantum MonteÂCarlo Study of 2D Materials: Cohesion and Band Gap in Single-Layer Phosphorene. Physical Review X, 2019, 9, .	2.8	27
9	Raman Activity of Multilayer Phosphorene under Strain. ACS Omega, 2019, 4, 22418-22425.	1.6	8
10	Subatomic-scale resolution with SPM: Co adatom on p(2 Ã— 1)Cu(110):O. Nanotechnology, 2019, 30, 095703.	1.3	2
11	Measurement and Manipulation of the Charge State of an Adsorbed Oxygen Adatom on the Rutile TiO₂(110)-1Ã—1 Surface by nc-AFM and KPFM. Journal of the American Chemical Society, 2018, 140, 15668-15674.	6.6	51
12	Subatomic-scale force vector mapping above a Ge(001) dimer using bimodal atomic forceÂmicroscopy. Nature Physics, 2017, 13, 663-667.	6.5	19
13	Optical Gaps in Pristine and Heavily Doped Silicon Nanocrystals: DFT versus Quantum Monte Carlo Benchmarks. Journal of Chemical Theory and Computation, 2017, 13, 6061-6067.	2.3	11
14	Limitations of Structural Superlubricity: Chemical Bonds versus Contact Size. ACS Nano, 2017, 11, 7642-7647.	7.3	83
15	High-Throughput Study of Compositions and Optical Properties in Heavily Co-Doped Silicon Nanoparticles. Journal of Physical Chemistry C, 2017, 121, 27741-27750.	1.5	11
16	Strain control of vibrational properties of few layer phosphorene. Journal of Applied Physics, 2016, 120, .	1.1	9
17	Charged vanadium-benzene multidecker clusters: DFT and quantum Monte Carlo study. Journal of Chemical Physics, 2016, 144, 064303.	1.2	4
18	Promoting Atoms into Delocalized Long-Living Magnetically Modified State Using Atomic Force Microscopy. Nano Letters, 2016, 16, 7490-7494.	4.5	2

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19	Quantum Monte Carlo study of one-dimensional transition-metal organometallic cluster systems and their suitability as spin filters. Physical Review B, 2014, 90, .	1.1	13
20	Image formation and contrast inversion in noncontact atomic force microscopy imaging of oxidized Cu(110) surfaces. Physical Review B, 2014, 90, .	1.1	8
21	Vertical atomic manipulation with dynamic atomic-force microscopy without tip change via a multi-step mechanism. Nature Communications, 2014, 5, 4476.	5.8	32
22	Critical Importance of van der Waals Stabilization in Strongly Chemically Bonded Surfaces: Cu(110):O. Journal of Chemical Theory and Computation, 2013, 9, 5578-5584.	2.3	10
23	Rigidity of the conductance of an anchored dithioazobenzene optomechanical switch. Physical Review B, 2013, 87, .	1.1	3
24	Quantum Monte Carlo Study of Ï€-Bonded Transition Metal Organometallics: Neutral and Cationic Vanadiumâ€“Benzene and Cobaltâ€“Benzene Half Sandwiches. Journal of Chemical Theory and Computation, 2013, 9, 390-400.	2.3	21
25	Spin Multiplicity and Symmetry Breaking in Vanadium-Benzene Complexes. Physical Review Letters, 2012, 109, 053001.	2.9	32
26	van der Waals Interaction Energies of Small Fragments of P, As, Sb, S, Se, and Te: Comparison of Complete Basis Set Limit CCSD(T) and DFT with Approximate Dispersion. Journal of Chemical Theory and Computation, 2012, 8, 2301-2309.	2.3	6
27	Chemical tip fingerprinting in scanning probe microscopy of an oxidized Cu(110) surface. Physical Review B, 2012, 86, .	1.1	21
28	Disentanglement of triplet and singlet states of azobenzene: direct EELS detection and QMC modeling. Physical Chemistry Chemical Physics, 2011, 13, 20939.	1.3	20
29	Simulation of frictional behavior of Sb nanoparticles on HOPG: Frictional duality and biduality. Physical Review B, 2011, 84, .	1.1	4
30	Understanding frictional duality and bi-duality: Sb-nanoparticles on HOPG. Nanotechnology, 2011, 22, 085704.	1.3	24
31	Ground and excited electronic states of azobenzene: A quantum Monte Carlo study. Journal of Chemical Physics, 2010, 133, 244301.	1.2	34
32	Optical, Mechanical, and Optoâ€Mechanical Switching of Anchored Dithioazobenzene Bridges. ChemPhysChem, 2010, 11, 345-348.	1.0	36
33	Switching of functionalized azobenzene suspended between gold tips by mechanochemical, photochemical, and opto-mechanical means. Physical Chemistry Chemical Physics, 2010, 12, 13922.	1.3	65
34	Nanoengineering with dynamic atomic force microscopy: Lateral interchange of adatoms on a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>Ge</mml:mtext><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mml:mn>111</mml:mn> Physical Review B, 2009, 79, .	1.1	8
35	Computer simuations for the nano-scale. Acta Physica Slovaca, 2007, 57, 1-176.	1.4	9
36	Effect of tip morphology on AFM images. Applied Physics A: Materials Science and Processing, 2001, 72, S63-S66.	1.1	2

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37	Electron correlation effects in ionic hydrogen clusters. International Journal of Quantum Chemistry, 2001, 83, 86-95.	1.0	12
38	Effect of tip morphology on image formation in noncontact atomic force microscopy:â€ƒInP(110). Physical Review B, 2001, 63, .	1.1	36
39	First-principles simulation of atomic force microscopy image formation on a GaAs(110) surface: Effect of tip morphology. Physical Review B, 2001, 63, .	1.1	37
40	Silicon Clusters of Intermediate Size: Energetics, Dynamics, and Thermal Effects. Physical Review Letters, 2000, 84, 1479-1482.	2.9	143
41	Structural, bonding, dynamical, and electronic properties of liquid silicon: Anab initiomolecular-dynamics study. Physical Review B, 1991, 44, 4262-4274.	1.1	206
42	Amorphous silicon studied by ab initio molecular dynamics: Preparation, structure, and properties. Physical Review B, 1991, 44, 11092-11104.	1.1	204