Bruno Schuler

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7008766/publications.pdf

Version: 2024-02-01

43	3,775	186209	243529
papers	citations	28 h-index	44 g-index

47	47	47	3902
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The role of chalcogen vacancies for atomic defect emission in MoS2. Nature Communications, 2021, 12, 3822.	5.8	94
2	Controllable pâ€Type Doping of 2D WSe₂ via Vanadium Substitution. Advanced Functional Materials, 2021, 31, 2105252.	7.8	40
3	The Role of Methyl Groups in the Early Stage of Thermal Polymerization of Polycyclic Aromatic Hydrocarbons Revealed by Molecular Imaging. Energy & Fuels, 2021, 35, 2224-2233.	2.5	21
4	Engineering and probing atomic quantum defects in 2D semiconductors: A perspective. Applied Physics Letters, 2021, 119, .	1.5	11
5	Spin-dependent vibronic response of a carbon radical ion in two-dimensional WS2. Nature Communications, 2021, 12, 7287.	5.8	15
6	Electrically driven photon emission from individual atomic defects in monolayer WS ₂. Science Advances, 2020, 6, .	4.7	53
7	Scalable Substitutional Reâ€Doping and its Impact on the Optical and Electronic Properties of Tungsten Diselenide. Advanced Materials, 2020, 32, e2005159.	11.1	32
8	Atomistic Positioning of Defects in Helium Ion Treated Single-Layer MoS₂. Nano Letters, 2020, 20, 4437-4444.	4.5	48
9	Overview of Asphaltene Nanostructures and Thermodynamic Applications. Energy & Fuels, 2020, 34, 15082-15105.	2.5	101
10	Resonant and bound states of charged defects in two-dimensional semiconductors. Physical Review B, 2020, 101, .	1.1	23
11	Intentional carbon doping reveals CH as an abundant charged impurity in nominally undoped synthetic WS₂ and WSe₂. 2D Materials, 2020, 7, 031003.	2.0	22
12	Charge-Induced Structural Changes in a Single Molecule Investigated by Atomic Force Microscopy. Physical Review Letters, 2019, 123, 066001.	2.9	11
13	How Substitutional Point Defects in Two-Dimensional WS₂ Induce Charge Localization, Spinâ€“Orbit Splitting, and Strain. ACS Nano, 2019, 13, 10520-10534.	7.3	86
14	Large Spin-Orbit Splitting of Deep In-Gap Defect States of Engineered Sulfur Vacancies in Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2019, 123, 076801.	2.9	120
15	Identifying substitutional oxygen as a prolific point defect in monolayer transition metal dichalcogenides. Nature Communications, 2019, 10, 3382.	5.8	196
16	Rasterkraftmikroskopie fÃ¼r die molekulare StrukturaufklÃ¤rung. Angewandte Chemie, 2018, 130, 3950-3972.	1.6	12
17	Atomic Force Microscopy for Molecular Structure Elucidation. Angewandte Chemie - International Edition, 2018, 57, 3888-3908.	7.2	135
18	Reorganization energy upon charging a single molecule on an insulator measured by atomic force microscopy. Nature Nanotechnology, 2018, 13, 376-380.	15.6	77

#	Article	IF	Citations
19	Addressing Long-Standing Chemical Challenges by AFM with Functionalized Tips. Advances in Atom and Single Molecule Machines, 2018, , 209-227.	0.0	2
20	Understanding the Effects of Sample Preparation on the Chemical Structures of Petroleum Imaged with Noncontact Atomic Force Microscopy. Industrial & Engineering Chemistry Research, 2018, 57, 15935-15941.	1.8	38
21	Multimodal spectromicroscopy of monolayer WS ₂ enabled by ultra-clean van der Waals epitaxy. 2D Materials, 2018, 5, 045010.	2.0	40
22	Atomic Force Microscopy Identifying Fuel Pyrolysis Products and Directing the Synthesis of Analytical Standards. Journal of the American Chemical Society, 2018, 140, 8156-8161.	6.6	27
23	Heavy Oil Based Mixtures of Different Origins and Treatments Studied by Atomic Force Microscopy. Energy & Fuels, 2017, 31, 6856-6861.	2.5	206
24	Characterizing aliphatic moieties in hydrocarbons with atomic force microscopy. Chemical Science, 2017, 8, 2315-2320.	3.7	102
25	Identical Binding Energies and Work Functions for Distinct Adsorption Structures: Olympicenes on the Cu(111) Surface. Journal of Physical Chemistry Letters, 2016, 7, 1022-1027.	2.1	22
26	Reversible Bergman cyclization by atomic manipulation. Nature Chemistry, 2016, 8, 220-224.	6.6	169
27	The Electric Field of CO Tips and Its Relevance for Atomic Force Microscopy. Nano Letters, 2016, 16, 1974-1980.	4.5	79
28	Effect of electron-phonon interaction on the formation of one-dimensional electronic states in coupled Cl vacancies. Physical Review B, 2015, 91, .	1.1	14
29	The Synthesis and STM/AFM Imaging of â€˜Olympiceneâ€™ Benzo[cd]pyrenes. Chemistry - A European Journal, 2015, 21, 2011-2018.	1.7	39
30	On-surface generation and imaging of arynes by atomic force microscopy. Nature Chemistry, 2015, 7, 623-628.	6.6	176
31	Toggling the Local Electric Field with an Embedded Adatom Switch. Nano Letters, 2015, 15, 5564-5568.	4.5	5
32	Unraveling the Molecular Structures of Asphaltenes by Atomic Force Microscopy. Journal of the American Chemical Society, 2015, 137, 9870-9876.	6.6	545
33	Atomic Resolution on Molecules with Functionalized Tips. Nanoscience and Technology, 2015, , 223-246.	1.5	5
34	Chapter 13. Prospects and Challenges in Molecular Structure Identification by Atomic Force Microscopy. , 2015, , 306-320.		2
35	Investigating atomic contrast in atomic force microscopy and Kelvin probe force microscopy on ionic systems using functionalized tips. Physical Review B, 2014, 90, .	1.1	59
36	Contrast Formation in Kelvin Probe Force Microscopy of Single Ï€-Conjugated Molecules. Nano Letters, 2014, 14, 3342-3346.	4.5	77

#	Article	IF	Citations
37	Image Distortions of a Partially Fluorinated Hydrocarbon Molecule in Atomic Force Microscopy with Carbon Monoxide Terminated Tips. Nano Letters, 2014, 14, 6127-6131.	4.5	73
38	From Perylene to a 22â€Ring Aromatic Hydrocarbon in Oneâ€Pot. Angewandte Chemie - International Edition, 2014, 53, 9004-9006.	7.2	94
39	Adsorption Geometry Determination of Single Molecules by Atomic Force Microscopy. Physical Review Letters, 2013, 111, 106103.	2.9	162
40	Chemische Bindungen visualisiert. Physik in Unserer Zeit, 2013, 44, 6-7.	0.0	3
41	Different tips for high-resolution atomic force microscopy and scanning tunneling microscopy of single molecules. Applied Physics Letters, 2013, 102, .	1.5	141
42	A Combined Atomic Force Microscopy and Computational Approach for the Structural Elucidation of Breitfussin A and B: Highly Modified Halogenated Dipeptides from Thuiaria breitfussi. Angewandte Chemie - International Edition, 2012, 51, 12238-12241.	7.2	92
43	Bond-Order Discrimination by Atomic Force Microscopy. Science, 2012, 337, 1326-1329.	6.0	457