

Wei Xu

List of Publications by Year in descending order

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111
papers

3,843
citations

117625

34
h-index

138484

58
g-index

116
all docs

116
docs citations

116
times ranked

3128
citing authors

#	ARTICLE	IF	CITATIONS
1	Metastable Structures and Recombination Pathways for Atomic Hydrogen on the Graphite (0001) Surface. <i>Physical Review Letters</i> , 2006, 96, 156104.	7.8	296
2	Clustering of Chemisorbed H(D) Atoms on the Graphite (0001) Surface due to Preferential Sticking. <i>Physical Review Letters</i> , 2006, 97, 186102.	7.8	260
3	Elementary Structural Motifs in a Random Network of Cytosine Adsorbed on a Gold(111) Surface. <i>Science</i> , 2008, 319, 312-315.	12.6	157
4	On-Surface Formation of One-Dimensional Polyphenylene through Bergman Cyclization. <i>Journal of the American Chemical Society</i> , 2013, 135, 8448-8451.	13.7	154
5	Dehalogenative Homocoupling of Terminal Alkynyl Bromides on Au(111): Incorporation of Acetylenic Scaffolding into Surface Nanostructures. <i>ACS Nano</i> , 2016, 10, 7023-7030.	14.6	150
6	On-Surface Synthesis of Carbon Nanostructures. <i>Advanced Materials</i> , 2018, 30, e1705630.	21.0	121
7	Cyanuric Acid and Melamine on Au(111): Structure and Energetics of Hydrogen-Bonded Networks. <i>Small</i> , 2007, 3, 854-858.	10.0	109
8	On-surface aryl-aryl coupling via selective C-H activation. <i>Chemical Communications</i> , 2014, 50, 11825-11828.	4.1	106
9	Bottom-Up Synthesis of Metalated Carbyne. <i>Journal of the American Chemical Society</i> , 2016, 138, 1106-1109.	13.7	104
10	Probing the Hierarchy of Thymine-Thymine Interactions in Self-Assembled Structures by Manipulation with Scanning Tunneling Microscopy. <i>Small</i> , 2007, 3, 2011-2014.	10.0	101
11	An Investigation into the Interactions Between Self-Assembled Adenine Molecules and a Au(111) Surface. <i>Small</i> , 2008, 4, 1494-1500.	10.0	98
12	On-surface construction of a metal-organic Sierpinski triangle. <i>Chemical Communications</i> , 2015, 51, 14164-14166.	4.1	75
13	Specificity of Watson-Crick Base Pairing on a Solid Surface Studied at the Atomic Scale. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 9673-9676.	13.8	71
14	Adenine monolayers on the Au(111) surface: Structure identification by scanning tunneling microscopy experiment and <i>ab initio</i> calculations. <i>Journal of Chemical Physics</i> , 2009, 130, 024705.	3.0	68
15	On-surface synthesis and characterization of individual polyacetylene chains. <i>Nature Chemistry</i> , 2019, 11, 924-930.	13.6	67
16	Dehydrogenative Homocoupling of Terminal Alkenes on Copper Surfaces: A Route to Dienes. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 4549-4552.	13.8	66
17	Prochiral Guanine Adsorption on Au(111): An Entropy-Stabilized Intermixed Guanine Quartet Chiral Structure. <i>Small</i> , 2009, 5, 1952-1956.	10.0	65
18	Competition between Hydrogen Bonds and Coordination Bonds Steered by the Surface Molecular Coverage. <i>ACS Nano</i> , 2017, 11, 3727-3732.	14.6	60

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19	Formation of polyphenyl chains through hierarchical reactions: Ullmann coupling followed by cross-dehydrogenative coupling. <i>Chemical Communications</i> , 2015, 51, 495-498.	4.1	58
20	Understanding the disorder of the DNA base cytosine on the Au(111) surface. <i>Journal of Chemical Physics</i> , 2008, 129, 184707.	3.0	57
21	Controlled Functionalization of Carbon Nanotubes by a Solvent-free Multicomponent Approach. <i>ACS Nano</i> , 2010, 4, 7379-7386.	14.6	57
22	On-Surface Formation of Cumulene by Dehalogenative Homocoupling of Alkenyl <i>gem</i> -Dibromides. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 12165-12169.	13.8	52
23	Unzipping of Functionalized Multiwall Carbon Nanotubes Induced by STM. <i>Nano Letters</i> , 2010, 10, 1764-1768.	9.1	50
24	Direct Formation of C [≡] C Triple-Bonded Structural Motifs by On-Surface Dehalogenative Homocouplings of Tribromomethyl-Substituted Arenes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4035-4038.	13.8	50
25	Guanine- and Potassium-Based Two-Dimensional Coordination Network Self-Assembled on Au(111). <i>Journal of the American Chemical Society</i> , 2010, 132, 15927-15929.	13.7	49
26	Supramolecular Architectures on Surfaces Formed through Hydrogen Bonding Optimized in Three Dimensions. <i>ACS Nano</i> , 2010, 4, 4097-4109.	14.6	48
27	Long range orientation of meta-stable atomic hydrogen adsorbate clusters on the graphite(0 0 0 1) surface. <i>Chemical Physics Letters</i> , 2007, 446, 237-242.	2.6	47
28	On-surface formation of two-dimensional polymer via direct C-H activation of metal phthalocyanine. <i>Chemical Communications</i> , 2015, 51, 2836-2839.	4.1	46
29	Supramolecular Porous Network Formed by Molecular Recognition between Chemically Modified Nucleobases Guanine and Cytosine. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 9373-9377.	13.8	45
30	Atomic-Scale Insight into Tautomeric Recognition, Separation, and Interconversion of Guanine Molecular Networks on Au(111). <i>Journal of the American Chemical Society</i> , 2015, 137, 11795-11800.	13.7	41
31	Ni-induced supramolecular structural transformation of cytosine on Au(111): from one-dimensional chains to zero-dimensional clusters. <i>Chemical Communications</i> , 2014, 50, 3242.	4.1	39
32	Atomic-Scale Investigation on the Facilitation and Inhibition of Guanine Tautomerization at Au(111) Surface. <i>ACS Nano</i> , 2014, 8, 1804-1808.	14.6	38
33	Hydrogen-Bonded Molecular Networks of Melamine and Cyanuric Acid on Thin Films of NaCl on Au(111). <i>Small</i> , 2009, 5, 2177-2182.	10.0	36
34	Formation of a G-Quartet-Fe Complex and Modulation of Electronic and Magnetic Properties of the Fe Center. <i>ACS Nano</i> , 2014, 8, 11799-11805.	14.6	35
35	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. <i>Nano Research</i> , 2012, 5, 903-916.	10.4	31
36	Single-molecule insight into Wurtz reactions on metal surfaces. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 2730-2735.	2.8	31

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37	STM manipulation of molecular moulds on metal surfaces. <i>Nano Research</i> , 2009, 2, 254-259.	10.4	29
38	Interplay of adsorbate-adsorbate and adsorbate-substrate interactions in self-assembled molecular surface nanostructures. <i>Nano Research</i> , 2010, 3, 459-471.	10.4	29
39	Solventless Formation of Gâ€‘Quartet Complexes Based on Alkali and Alkaline Earth Salts on Au(111). <i>ChemPhysChem</i> , 2015, 16, 2099-2105.	2.1	28
40	Controllable Scission and Seamless Stitching of Metalâ€‘Organic Clusters by STM Manipulation. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 6526-6530.	13.8	28
41	Influence of Alkyl Side Chains on Hydrogenâ€‘Bonded Molecular Surface Nanostructures. <i>Small</i> , 2008, 4, 1620-1623.	10.0	26
42	Atomic-scale structures and interactions between the guanine quartet and potassium. <i>Chemical Communications</i> , 2013, 49, 7210.	4.1	26
43	The stereoselective synthesis of dienes through dehalogenative homocoupling of terminal alkenyl bromides on Cu(110). <i>Chemical Communications</i> , 2016, 52, 6009-6012.	4.1	26
44	Direct Formation of Câ€‘C Double-Bonded Structural Motifs by On-Surface Dehalogenative Homocoupling of <i>gem</i> -Dibromomethyl Molecules. <i>ACS Nano</i> , 2018, 12, 7959-7966.	14.6	24
45	Scanning tunneling microscopy and Raman spectroscopy of polymeric sp ² carbon atomic wires synthesized on the Au(111) surface. <i>Nanoscale</i> , 2019, 11, 18191-18200.	5.6	24
46	Real-Space Evidence of Rare Guanine Tautomer Induced by Water. <i>ACS Nano</i> , 2016, 10, 3776-3782.	14.6	23
47	Structural Transformation and Stabilization of Metalâ€‘Organic Motifs Induced by Halogen Doping. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5077-5081.	13.8	21
48	Water-Induced Chiral Separation on a Au(111) Surface. <i>ACS Nano</i> , 2021, 15, 16896-16903.	14.6	20
49	On-surface synthesis of graphyne nanowires through stepwise reactions. <i>Chemical Communications</i> , 2020, 56, 1685-1688.	4.1	19
50	Homochiral Xanthine Quintet Networks Self-Assembled on Au(111) Surfaces. <i>ACS Nano</i> , 2011, 5, 6651-6660.	14.6	18
51	Identification of Molecularâ€‘Adsorption Geometries and Intermolecular Hydrogenâ€‘Bonding Configurations by In Situ STM Manipulation. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7442-7445.	13.8	18
52	Onâ€‘Surface Formation of Cumulene by Dehalogenative Homocoupling of Alkenyl <i>gem</i> -Dibromides. <i>Angewandte Chemie</i> , 2017, 129, 12333-12337.	2.0	18
53	Constitutional Dynamics of Metalâ€‘Organic Motifs on a Au(111) Surface. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 7157-7160.	13.8	17
54	Onâ€‘Surface Dualâ€‘Response Structural Transformations of Guanine Molecules and Fe Atoms. <i>Chemistry - A European Journal</i> , 2017, 23, 2356-2362.	3.3	16

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55	A self-assembled molecular nanostructure for trapping the native adatoms on Cu(110). <i>Chemical Communications</i> , 2013, 49, 1735.	4.1	15
56	Dehydrogenative Homocoupling of Alkyl Chains on Cu(110). <i>Chemistry - A European Journal</i> , 2016, 22, 1918-1921.	3.3	15
57	On-Surface Synthesis of One-Dimensional Carbon-Based Nanostructures via C ^X and C ^H Activation Reactions. <i>ChemPhysChem</i> , 2019, 20, 2251-2261.	2.1	15
58	Dissymmetric On-Surface Dehalogenation Reaction Steered by Preformed Self-Assembled Structure. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1867-1872.	4.6	15
59	Scission and stitching of adenine structures by water molecules. <i>Chemical Communications</i> , 2018, 54, 771-774.	4.1	14
60	Nickel Adatoms Induced Tautomeric Dehydrogenation of Thymine Molecules on Au(111). <i>ACS Nano</i> , 2018, 12, 9033-9039.	14.6	14
61	Switching the Spin on a Ni Trimer within a Metal-Organic Motif by Controlling the On-Top Bromine Atom. <i>ACS Nano</i> , 2019, 13, 9936-9943.	14.6	14
62	Bond-Scission-Induced Structural Transformation from Cumulene to Diyne Moiety and Formation of Semiconducting Organometallic Polyynes. <i>Journal of the American Chemical Society</i> , 2020, 142, 8085-8089.	13.7	14
63	Tunable Thiolate Coordination Networks on Metal Surfaces. <i>ChemNanoMat</i> , 2020, 6, 1479-1484.	2.8	14
64	Structural, Electronic, and Vibrational Properties of a Two-Dimensional Graphdiyne-like Carbon Nanonetwork Synthesized on Au(111): Implications for the Engineering of sp ² Carbon Nanostructures. <i>ACS Applied Nano Materials</i> , 2020, 3, 12178-12187.	5.0	14
65	On-Surface Debromination of C ₆ Br ₆ : C ₆ Ring versus C ₆ Chain. <i>ACS Nano</i> , 2022, 16, 6578-6584.	14.6	14
66	Self-Organization of Gold-Containing Hydrogen-Bonded Rosette Assemblies on Graphite Surface. <i>Langmuir</i> , 2007, 23, 10294-10298.	3.5	13
67	Surface-assisted cis-trans isomerization of an alkene molecule on Cu(110). <i>Chemical Communications</i> , 2014, 50, 1728-1730.	4.1	13
68	Two-dimensional self-assembled nanostructures of nucleobases and their related derivatives on Au(111). <i>Chemical Communications</i> , 2018, 54, 9259-9269.	4.1	13
69	Local Chiral Inversion of Thymine Dimers by Manipulating Single Water Molecules. <i>Journal of the American Chemical Society</i> , 2022, 144, 5023-5028.	13.7	13
70	Linear hydrogen adsorbate structures on graphite induced by self-assembled molecular monolayers. <i>Carbon</i> , 2012, 50, 2052-2056.	10.3	12
71	Exploring the transferability of large supramolecular assemblies to the vacuum-solid interface. <i>Nano Research</i> , 2009, 2, 535-542.	10.4	11
72	Lattice-Directed Selective Synthesis of Acetylenic and Diacetylenic Organometallic Polyynes. <i>Chemistry of Materials</i> , 2022, 34, 1770-1777.	6.7	11

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73	Dissociation of iridium(III) phosphorescent emitters upon adsorption on Cu(110) revealed by scanning tunneling microscopy. <i>Applied Physics Letters</i> , 2006, 89, 264102.	3.3	10
74	On-surface synthesis of organometallic complex via metal-alkene interactions. <i>Chemical Communications</i> , 2014, 50, 15924-15927.	4.1	10
75	Self-assembly of melem on Au(111) and Ag(111): the origin of two different hydrogen bonding configurations. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 18704-18708.	2.8	10
76	Direct Formation of C-C Triple-Bonded Structural Motifs by On-Surface Dehalogenative Homocouplings of Tribromomethyl-Substituted Arenes. <i>Angewandte Chemie</i> , 2018, 130, 4099-4102.	2.0	10
77	Selectively Scissoring Hydrogen-Bonded Cytosine Dimer Structures Catalyzed by Water Molecules. <i>ACS Nano</i> , 2020, 14, 10680-10687.	14.6	10
78	Enhanced Stability of Large Molecules Vacuum-Sublimated onto Au(111) Achieved by Incorporation of Coordinated Au-Atoms. <i>Journal of the American Chemical Society</i> , 2007, 129, 10624-10625.	13.7	9
79	Iodine-Induced Structural Transformations of Co-Phthalocyanine on Au(111). <i>Journal of Physical Chemistry C</i> , 2018, 122, 22959-22964.	3.1	9
80	Chlorine-assisted fabrication of hybrid supramolecular structures <i>via</i> electrostatic interactions. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 9357-9361.	2.8	9
81	Controlling on-surface molecular diffusion behaviors by functionalizing the organic molecules with tert-butyl groups. <i>Applied Physics Letters</i> , 2013, 103, 013103.	3.3	8
82	Oxygen-induced self-assembly of quaterphenyl molecules on metal surfaces. <i>Chemical Communications</i> , 2014, 50, 12112-12115.	4.1	8
83	Structural diversity of metal-organic self-assembly assisted by chlorine. <i>Chemical Communications</i> , 2017, 53, 8767-8769.	4.1	8
84	Structural Transformation and Stabilization of Metal-Organic Motifs Induced by Halogen Doping. <i>Angewandte Chemie</i> , 2017, 129, 5159-5163.	2.0	7
85	Dissolution of Sodium Halides by Confined Water on Au(111) <i>via</i> Langmuir-Hinshelwood Process. <i>ACS Nano</i> , 2019, 13, 6025-6032.	14.6	7
86	Regulating the Interactions of Adsorbates on Surfaces by Scanning Tunneling Microscopy Manipulation. <i>ChemPhysChem</i> , 2014, 15, 2657-2663.	2.1	6
87	On-Surface Fabrication of Bimetallic Metal-Organic Frameworks through the Synergy and Competition among Noncovalent Interactions. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 5228-5232.	4.6	6
88	A molecular conformational change induced self-assembly: from randomness to order. <i>Chemical Communications</i> , 2013, 49, 5207.	4.1	5
89	Tailoring on-surface supramolecular architectures based on adenine directed self-assembly. <i>Chemical Communications</i> , 2014, 50, 356-358.	4.1	5
90	Real-Space Evidence of Trimeric, Tetrameric, and Pentameric Uracil Clusters Induced by Alkali Metals. <i>Journal of Physical Chemistry C</i> , 2020, 124, 5257-5262.	3.1	5

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91	Hydration of iodine adsorbed on the Au(111) surface. <i>Fundamental Research</i> , 2022, 2, 546-549.	3.3	5
92	Constitutional Dynamics of Metal-Organic Motifs on a Au(111) Surface. <i>Angewandte Chemie</i> , 2016, 128, 7273-7276.	2.0	4
93	Real-space evidence of the formation of the GCGC tetrad and its competition with the G-quartet on the Au(111) surface. <i>Chemical Communications</i> , 2017, 53, 9846-9849.	4.1	4
94	Real-space evidence of Watson-Crick and Hoogsteen adenine-uracil base pairs on Au(111). <i>Chemical Communications</i> , 2018, 54, 3715-3718.	4.1	4
95	The Stereoselective Formation of trans-Cumulene through Dehalogenative Homocoupling of Alkenyl gem-Dibromides on Cu(110). <i>ChemCatChem</i> , 2019, 11, 5417-5420.	3.7	4
96	Adsorption-geometry induced transformation of self-assembled nanostructures of an aldehyde molecule on Cu(110). <i>Nanoscale</i> , 2014, 6, 11062-11065.	5.6	3
97	Linear array of cesium atoms assisted by uracil molecules on Au(111). <i>Chemical Communications</i> , 2019, 55, 12064-12067.	4.1	3
98	Selective On-Surface Reactions of the Alkenyl gem-Dibromide Group Directed by Substrate Lattices. <i>Journal of Physical Chemistry C</i> , 2021, 125, 23840-23847.	3.1	3
99	On-Surface Synthesis of sp-Carbon Nanostructures. <i>Nanomaterials</i> , 2022, 12, 137.	4.1	3
100	On-Surface Synthesis of Adenine Oligomers via Ullmann Reaction. <i>ChemPhysChem</i> , 2017, 18, 3544-3547.	2.1	2
101	On-Surface Fabrication of Complex Hybrid Nanostructures. <i>Journal of Physical Chemistry C</i> , 2021, 125, 354-357.	3.1	2
102	Interactions between Bases and Metals on Au(111) under Ultrahigh Vacuum Conditions. <i>Wuli Huaxue Xuebao/ Acta Physico-Chimica Sinica</i> , 2018, 34, 1321-1333.	4.9	2
103	Interconversion between guanine quartets and triads on the Au(111) surface. <i>Chemical Communications</i> , 2022, 58, 3198-3201.	4.1	2
104	Interactions between water and organic molecules or inorganic salts on surfaces. <i>Aggregate</i> , 2022, 3, .	9.9	2
105	Hierarchical formation of Fe-9eG supramolecular networks via flexible coordination bonds. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 3694-3698.	2.8	1
106	Three-dimensional hydrogen bonding between Landers and planar molecules facilitated by electrostatic interactions with Ni adatoms. <i>Chemical Communications</i> , 2018, 54, 8845-8848.	4.1	1
107	On-Surface Intramolecular Dehalogenation of Vicinal Dibromides for the Direct Formation of C=C Double Bonds. <i>Journal of Physical Chemistry C</i> , 2019, 123, 30467-30472.	3.1	1
108	Atomic-Scale Probing the Priority of Oxidation Sites of an Organic Molecule Adsorbed at the Cu ₂ O/Cu(110) Interface. <i>ChemCatChem</i> , 2013, 5, 2662-2666.	3.7	0

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109	On-surface stereoconvergent synthesis, dimerization and hybridization of organocopper complexes. Science China Chemistry, 2019, 62, 126-132.	8.2	0
110	ON-SURFACE MOLECULAR REACTIONS. Surface Review and Letters, 2021, 28, 2140006.	1.1	0
111	Dehydrogenative and Dehalogenative Homocoupling Reactions of C–X Groups on Metal Surfaces. Advances in Atom and Single Molecule Machines, 2018, , 63-81.	0.0	0