Xin-Rui Miao

List of Publications by Citations

87	1,355	23	32
papers	citations	h-index	g-index
94	1,598	4.5	4.63
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
87	Two-Dimensional Self-Assembled Molecular Structures Formed by the Competition of van der Waals Forces and Dipole–Dipole Interactions. *Journal of Physical Chemistry C*, **2012**, 116, 1061-1069	3.8	76
86	A robust superhydrophobic PDMS@ZnSn(OH)6 coating with under-oil self-cleaning and flame retardancy. *Journal of Materials Chemistry A*, **2017**, 5, 22761-22771	13	58
85	Robust and thermal-healing superhydrophobic surfaces by spin-coating of polydimethylsiloxane. *Journal of Colloid and Interface Science*, **2017**, 508, 18-27	9.3	54
84	Dipole-Controlled Self-Assembly of 2,7-Bis(n-alkoxy)-9-fluorenone: Odd–Even and Chain-Length Effects. *Journal of Physical Chemistry C*, **2013**, 117, 12707-12714	3.8	46
83	Concentration dependent halogen-bond density in the 2D self-assembly of a thienophenanthrene derivative at the aliphatic acid/graphite interface. *Chemical Communications*, **2014**, 50, 9003-6	5.8	45
82	Designing robust alumina nanowires-on-nanopores structures: superhydrophobic surfaces with slippery or sticky water adhesion. *Journal of Colloid and Interface Science*, **2013**, 409, 18-24	9.3	40
81	Controllable Orientation of Ester-Group-Induced Intermolecular Halogen Bonding in a 2D Self-Assembly. *Journal of Physical Chemistry Letters*, **2016**, 7, 3164-70	6.4	37
80	Eco-friendly preparation of robust superhydrophobic Cu(OH) 2 coating for self-cleaning, oil-water separation and oil sorption. *Surface and Coatings Technology*, **2017**, 325, 14-21	4.4	36
79	Hydroxyl versus Carboxyl Substituent: Effects of Competitive and Cooperative Multiple Hydrogen Bonds on Concentration-Controlled Self-Assembly. *Journal of Physical Chemistry C*, **2016**, 120, 14187-14197	3.8	35
78	Self-Assembly Polymorphism: Solvent-Responsive Two-Dimensional Morphologies of 2,7-Ditridecyloxy-9-fluorenone by Scanning Tunneling Microscopy. *Journal of Physical Chemistry C*, **2012**, 116, 16014-16022	3.8	35
77	An alternative fabrication of underoil superhydrophobic or underwater superoleophobic stainless steel meshes for oil-water separation: Originating from one-step vapor deposition of polydimethylsiloxane. *Separation and Purification Technology*, **2018**, 204, 116-126	8.3	34
76	Solvent-Induced Structural Transitions of a 1,3,5-Tris(10-ethoxycarbonyldecyloxy)benzene Assembly Revealed by Scanning Tunneling Microscopy. *Journal of Physical Chemistry C*, **2011**, 115, 3358-3367	3.8	34
75	Influence of hydrogen bonds and double bonds on the alkane and alkene derivatives self-assembled monolayers on HOPG surface: STM observation and computer simulation. *Applied Surface Science*, **2010**, 256, 4647-4655	6.7	34
74	One-Step Fabrication of Non-Fluorinated Transparent Super-Repellent Surfaces with Tunable Wettability Functioning in Both Air and Oil. *ACS Applied Materials & Interfaces*, **2017**, 9, 15857-15867	9.5	31
73	Hydrogen-bonding-induced polymorphous phase transitions in 2D organic nanostructures. *Chemistry - an Asian Journal*, **2013**, 8, 926-33	4.5	31
72	Cooperation and competition between halogen bonding and van der Waals forces in supramolecular engineering at the aliphatic hydrocarbon/graphite interface: position and number of bromine group effects. *Nanoscale*, **2017**, 9, 237-250	7.7	29
71	STM investigation of structural isomers: alkyl chain position induced self-assembly at the liquid/solid interface. *Physical Chemistry Chemical Physics*, **2016**, 18, 624-34	3.6	29

70	Tuning the packing density of host molecular self-assemblies at the solid-liquid interface using guest molecule. *Chemical Communications*, **2010**, 46, 8830-2	5.8	29
69	Concentration-dependent structure and structural transition from chirality to nonchirality at the liquid-solid interface by coassembly. *Nanoscale*, **2015**, 7, 11734-45	7.7	28
68	Highly efficient separation of surfactant stabilized water-in-oil emulsion based on surface energy gradient and flame retardancy. *Journal of Colloid and Interface Science*, **2018**, 520, 1-10	9.3	27
67	Fabrication of mesoporous silica hollow spheres using triblock copolymer PEG□PPG□PEG as template. *Journal of Non-Crystalline Solids*, **2010**, 356, 898-905	3.9	27
66	Chiral Transition of the Supramolecular Assembly by Concentration Modulation at the Liquid/Solid Interface. *Journal of Physical Chemistry C*, **2015**, 119, 17920-17929	3.8	25
65	Halogen bonding versus hydrogen bonding induced 2D self-assembled nanostructures at the liquid-solid interface revealed by STM. *Physical Chemistry Chemical Physics*, **2017**, 19, 3143-3150	3.6	24
64	Structural transition control between dipole□dipole and hydrogen bonds induced chirality and achirality. *CrystEngComm*, **2016**, 18, 3019-3032	3.3	23
63	Steric matching and the concentration induced self-assembled structural variety of 2,7-bis(n-alkoxy)-9-fluorenone at the aliphatic solvent/graphite interface. *Physical Chemistry Chemical Physics*, **2014**, 16, 12544-53	3.6	23
62	Self-assembly polymorphism of 2,7-bis-nonyloxy-9-fluorenone: solvent induced the diversity of intermolecular dipole-dipole interactions. *Physical Chemistry Chemical Physics*, **2015**, 17, 3627-36	3.6	21
61	Effects of the position and number of bromine substituents on the concentration-mediated 2D self-assembly of phenanthrene derivatives. *Physical Chemistry Chemical Physics*, **2016**, 18, 7208-15	3.6	20
60	Polymorphic Self-Assemblies of 2,7-Bis(decyloxy)-9-fluorenone at the Solid/Gas Interface: Role of C□H□□O?C Hydrogen Bond. *Journal of Physical Chemistry C*, **2017**, 121, 3947-3957	3.8	18
59	Halogen Substituent Effects on Concentration-Controlled Self-Assembly of Fluorenone Derivatives: Halogen Bond versus Hydrogen Bond. *Journal of Physical Chemistry C*, **2019**, 123, 4349-4359	3.8	18
58	Effects of Mn doping on structural and dielectric properties of sol□gel-derived (Ba0.835Ca0.165)(Zr0.09Ti0.91)O3 thin films. *Thin Solid Films*, **2012**, 520, 5146-5150	2.2	18
57	Strong electron acceptor additive for achieving efficient polymer solar cells with P3HT: PCBM films by a quick drying process. *Synthetic Metals*, **2013**, 168, 43-47	3.6	18
56	Adsorption characteristic of self-assembled corrole dimers on HOPG. *Surface and Interface Analysis*, **2009**, 41, 225-230	1.5	15
55	Fabrication of microporous hollow silica spheres templated by NP-10 micelles without calcinations. *Applied Surface Science*, **2011**, 257, 2481-2488	6.7	15
54	Cooperating dipole-dipole and van der Waals interactions driven 2D self-assembly of fluorenone derivatives: ester chain length effect. *Physical Chemistry Chemical Physics*, **2017**, 19, 31113-31120	3.6	13
53	Side chain position, length and odd/even effects on the 2D self-assembly of mono-substituted anthraquinone derivatives at the liquid/solid interface. *RSC Advances*, **2015**, 5, 93337-93346	3.7	12

52	An ionic molecular glass as electron injection layer for efficient polymer light-emitting diode. *Macromolecular Rapid Communications*, **2009**, 30, 1484-91	4.8	12
51	Cooperation and competition of hydrogen and halogen bonds in 2D self-assembled nanostructures based on bromine substituted coumarins. *New Journal of Chemistry*, **2019**, 43, 17182-17187	3.6	12
50	Bromine Substituent Position Triggered Halogen versus Hydrogen Bond in 2D Self-Assembly of Fluorenone Derivatives. *Journal of Physical Chemistry C*, **2019**, 123, 26191-26200	3.8	11
49	Molecular trapping in two-dimensional chiral organic Kagom□hanoarchitectures composed of Baravelle spiral triangle enantiomers. *NPG Asia Materials*, **2020**, 12,	10.3	10
48	Effects of alkyl chain number and position on 2D self-assemblies. *RSC Advances*, **2017**, 7, 32391-32398	3.7	10
47	Two side chains, three supramolecules: exploration of fluorenone derivatives towards crystal engineering. *Physical Chemistry Chemical Physics*, **2017**, 19, 19205-19216	3.6	10
46	Self-assembly of dendronized non-planar conjugated molecules on a HOPG surface. *Applied Surface Science*, **2012**, 263, 73-78	6.7	10
45	Fabrication of chiral networks for a tri-substituted anthraquinone derivative using molecular self-assembly. *Physical Chemistry Chemical Physics*, **2016**, 18, 13164-8	3.6	10
44	Solvent Effect on Host□Guest Two-Dimensional Self-Assembly Mediated by Halogen Bonding. *Journal of Physical Chemistry C*, **2018**, 122, 22597-22604	3.8	10
43	Halogen-bonded building block for 2D self-assembly: Triggered by hydrogen-bonding motifs relative to the terminal functions of the side chains. *Applied Surface Science*, **2020**, 515, 145983	6.7	9
42	The Br□halogen bond assisted self-assembly of an asymmetric molecule regulated by concentration. *Chemical Communications*, **2020**, 56, 2727-2730	5.8	9
41	Two-dimensional self-assembly of single-, poly- and co-crystals at the liquid/solid interface. *CrystEngComm*, **2014**, 16, 9690-9696	3.3	9
40	Exploration of Chirality and Achirality of Self-Assembled Monolayer Formed by Unsymmetrically Substituted Fluorenone Derivative at the Liquid/Solid Interface. *Advanced Materials Interfaces*, **2018**, 5, 1700611	4.6	9
39	Tale of Alkyl Chains: Chain-Length Effect-Directed Formation of Complex Self-Assembly Behaviors at the Liquid/Solid Interface for Unsymmetrically Substituted Fluorenone Derivatives. *Journal of Physical Chemistry C*, **2018**, 122, 4496-4506	3.8	8
38	Chiral polymorphism in the self-assemblies of achiral molecules induced by multiple hydrogen bonds. *Physical Chemistry Chemical Physics*, **2018**, 20, 11160-11173	3.6	8
37	Concentration-dependent multiple chirality transition in halogen-bond-driven 2D self-assembly process. *Applied Surface Science*, **2018**, 433, 1075-1082	6.7	8
36	One Chain Fixed, One Chain Modified by □5H10□An Efficient Strategy on Fabricating Structural Diversity for 2D Self-Assembly. *Journal of Physical Chemistry C*, **2017**, 121, 21449-21460	3.8	8
35	Hydrogen bonds induced supramolecular self-assembly of azobenzene derivatives on the highly oriented pyrolytic graphite surface. *Surface Science*, **2012**, 606, L59-L63	1.8	8

34	First self-assembly study of large π-conjugated corrole dimers on solid substrates. *Applied Surface Science*, **2009**, 255, 5885-5890	6.7	8
33	Two-dimensional self-assembly of esters with different configurations at the liquid–solid interface. *Applied Surface Science*, **2011**, 257, 4559-4565	6.7	8
32	Halogen-Bond-Controlled Self-Assembly of Regioisomeric Phenanthridine Derivatives into Nanowires and Nanosheets. *Journal of Physical Chemistry C*, **2020**, 124, 5665-5671	3.8	7
31	Two-dimensional self-assembly of a porphyrin-polypyridyl ruthenium(II) hybrid on hopg surface through metal-ligand interactions. *ChemPhysChem*, **2010**, 11, 1951-5	3.2	7
30	Systematical Investigation of Chain Length Effect on the Melting Point of a Series of Bifunctional Anthraquinone Derivatives via X-ray Diffraction and Scanning Tunneling Microscopy. *Journal of Physical Chemistry C*, **2020**, 124, 1646-1654	3.8	7
29	Geometry Symmetry of Conjugated Cores along C–Br Bond Effect on the 2D Self-Assembly by Intermolecular H···Br and Br···Br Bonds. *Journal of Physical Chemistry C*, **2018**, 122, 15338-15343	3.8	6
28	Synthesis and characterizations of poly(3,6-thienophenanthrene) and poly(2,7-thienophenanthrene) and their applications in polymer light-emitting devices and solar cells. *Organic Electronics*, **2014**, 15, 2311-2321	3.5	6
27	STM Exploration of the Diverse Polymorphs for Tri-Substituted Anthraquinone Derivatives via Alkyl Chain Elongation. *Advanced Materials Interfaces*, **2016**, 3, 1600428	4.6	6
26	V-Shape Molecular Self-Adaption Triggered 2D Self-Assembled Polymorphism by Coadsorption of n-Tetradecane Solvent. *Journal of Physical Chemistry C*, **2019**, 123, 27643-27650	3.8	5
25	Same building block, but diverse surface-confined self-assemblies: solvent and concentration effects-induced structural diversity towards chirality and achirality. *Physical Chemistry Chemical Physics*, **2018**, 20, 17367-17379	3.6	5
24	Effect of Pyridyl Orientation on the Molecular Conformation and Self-Assembled Morphology of Regioisomeric Diketopyrrolopyrrole Derivatives. *Journal of Physical Chemistry C*, **2017**, 121, 19305-19313	3.8	5
23	Template-assisted 2D self-assembled chiral Kagome network for selective adsorption of coronene. *Chemical Communications*, **2020**, 56, 13991-13994	5.8	5
22	Solvent- and guest-responsive supramolecular self-assembly of 1,3,5-tris(10-carboxydecyloxy) benzene by scanning tunneling microscopy. *Applied Surface Science*, **2014**, 313, 841-849	6.7	4
21	Synthesis, crystal structures, photophysical properties and self-assembly of fluorene-based bis-Schiff bases. *Materials Chemistry and Physics*, **2010**, 124, 1105-1112	4.4	4
20	Growth behaviour of cerium-based conversion coating on Zn-5%Al alloy. *Surface and Interface Analysis*, **2019**, 51, 465-474	1.5	4
19	Self-Assembly Polymorphism of Regioisomeric Diketopyrrolopyrrole-Based π-Conjugated Organic Semiconductors. *Journal of Physical Chemistry C*, **2019**, 123, 1185-1193	3.8	4
18	Intermolecular H···O?C bonds induced 2D self-assembly of thiophene based diketopyrrolopyrrole derivative. *Surface and Interface Analysis*, **2017**, 49, 735-739	1.5	3
17	Room-temperature pulsed laser deposition and dielectric properties of amorphous Bi3.95Er0.05Ti3O12 thin films on conductive substrates. *Applied Physics A: Materials Science and Processing*, **2013**, 111, 1113-1117	2.6	3

16	Ordering self-assembly structures via intermolecular BrS interactions. *Physical Chemistry Chemical Physics*, **2020**, 22, 1437-1443	3.6	3
15	Concentration-Dependent Conformational Isomerization of Fluorenone-Based Polycatenar in 2D Polymorphic Self-Assembly. *Journal of Physical Chemistry C*, **2020**, 124, 25396-25402	3.8	3
14	Structural Insights into the Dual-Phase Emission Mechanism of Naphthalene Derivatives with Scanning Tunneling Microscopy, X-ray Diffraction, and Density Functional Theory Calculations. *Journal of Physical Chemistry C*, **2020**, 124, 5715-5722	3.8	2
13	Elucidating Halogen-Assisted Self-Assembly Enhanced Mechanochromic Aggregation-Induced Emission. *ChemPhotoChem*, **2021**, 5, 626-631	3.3	2
12	Solvent Effect on Halogen-Bonded Self-Assembled Nanostructures of a 2,9-Dibromo-Phenanthridine Derivative at the Liquid□Solid Interface. *Journal of Physical Chemistry C*, **2021**, 125, 1378-1383	3.8	2
11	Solvent-Dependent Self-Assembly of 4,7-Dibromo-5,6-bis(octyloxy)benzo[c][1,2,5] Thiadiazole on Graphite Surface by Scanning Tunneling Microscopy. *Journal of Nanomaterials*, **2013**, 2013, 1-7	3.2	1
10	Two-dimensional self-assembly of dendritic amphiphilic molecule with ferroncenyl subsitutuents at the liquid/solid interface. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 1403-5	1.3	1
9	Effect of bromine and substituted alkyl chain on the interfacial self-assembly of bromobenzene derivatives by scanning tunneling microscopy. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 179-86	1.3	1
8	Characterization and tunneling conductance spectra of N,N?-bis (9H-fluoren-9-ylidene)benzene-1,4-diamine thin films on graphite. *Materials Chemistry and Physics*, **2010**, 121, 572-577	4.4	1
7	Halogen bonding controlled 2D self-assembled polymorphism of regioisomeric thienophenanthrene derivatives by coadsorption. *New Journal of Chemistry*, **2021**, 45, 6811-6816	3.6	1
6	Solvent-Dependent Molecular Isomerization and 2D Self-Assembled Phase Transitions of Benzothiadiazole-Based □Conjugated Fluorophore. *Journal of Physical Chemistry C*, **2021**, 125, 19325-19332	3.8	1
5	Solvent Coadsorption Effect on I□□O Halogen-Bonded 2D Self-Assembled Nanostructures. *Journal of Physical Chemistry C*, **2022**, 126, 5777-5783	3.8	1
4	A simple and environmental strategy to separate and purify dye-contaminated emulsion using waste porous honeycomb cinder. *Journal of Dispersion Science and Technology*, **2020**, 1-11	1.5	0
3	Concentration induced the interfacial self-assembly polymorphism of 4, 4?-dihexadecyloxy-benzophenon by scanning tunneling microscopy. *Surface and Interface Analysis*, **2013**, 45, 1304-1308	1.5	0
2	Halogen Bonds Fabricate 2D Molecular Self-Assembled Nanostructures by Scanning Tunneling Microscopy. *Crystals*, **2020**, 10, 1057	2.3	0
1	Conformation modification of terthiophene during the on-surface synthesis of pure polythiophene. *Nanoscale*, **2020**, 12, 18096-18105	7.7	0