

# Xin-Rui Miao

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

87

papers

1,355

citations

23

h-index

32

g-index

94

ext. papers

1,598

ext. citations

4.5

avg, IF

4.63

L-index

#	Paper	IF	Citations
87	Solvent Coadsorption Effect on $\pi$ - $\pi$ Halogen-Bonded 2D Self-Assembled Nanostructures. <i>Journal of Physical Chemistry C</i> , <b>2022</b> , 126, 5777-5783	3.8	1
86	Elucidating Halogen-Assisted Self-Assembly Enhanced Mechanochromic Aggregation-Induced Emission. <i>ChemPhotoChem</i> , <b>2021</b> , 5, 626-631	3.3	2
85	Halogen bonding controlled 2D self-assembled polymorphism of regioisomeric thienophenanthrene derivatives by coadsorption. <i>New Journal of Chemistry</i> , <b>2021</b> , 45, 6811-6816	3.6	1
84	Solvent Effect on Halogen-Bonded Self-Assembled Nanostructures of a 2,9-Dibromo-Phenanthridine Derivative at the Liquid/Solid Interface. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 1378-1383	3.8	2
83	Solvent-Dependent Molecular Isomerization and 2D Self-Assembled Phase Transitions of Benzothiadiazole-Based $\pi$ -Conjugated Fluorophore. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 19325-19332	3.8	1
82	A simple and environmental strategy to separate and purify dye-contaminated emulsion using waste porous honeycomb cinder. <i>Journal of Dispersion Science and Technology</i> , <b>2020</b> , 1-11	1.5	0
81	Molecular trapping in two-dimensional chiral organic Kagom $\pi$ nanoarchitectures composed of Baravelle spiral triangle enantiomers. <i>NPG Asia Materials</i> , <b>2020</b> , 12,	10.3	10
80	Halogen-bonded building block for 2D self-assembly: Triggered by hydrogen-bonding motifs relative to the terminal functions of the side chains. <i>Applied Surface Science</i> , <b>2020</b> , 515, 145983	6.7	9
79	Structural Insights into the Dual-Phase Emission Mechanism of Naphthalene Derivatives with Scanning Tunneling Microscopy, X-ray Diffraction, and Density Functional Theory Calculations. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 5715-5722	3.8	2
78	Halogen-Bond-Controlled Self-Assembly of Regioisomeric Phenanthridine Derivatives into Nanowires and Nanosheets. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 5665-5671	3.8	7
77	The Br $\pi$ halogen bond assisted self-assembly of an asymmetric molecule regulated by concentration. <i>Chemical Communications</i> , <b>2020</b> , 56, 2727-2730	5.8	9
76	Ordering self-assembly structures via intermolecular Br $\pi$ interactions. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 1437-1443	3.6	3
75	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. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 1646-1654	3.8	7
74	Template-assisted 2D self-assembled chiral Kagom $\pi$ network for selective adsorption of coronene. <i>Chemical Communications</i> , <b>2020</b> , 56, 13991-13994	5.8	5
73	Concentration-Dependent Conformational Isomerization of Fluorenone-Based Polycatenar in 2D Polymorphic Self-Assembly. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 25396-25402	3.8	3
72	Halogen Bonds Fabricate 2D Molecular Self-Assembled Nanostructures by Scanning Tunneling Microscopy. <i>Crystals</i> , <b>2020</b> , 10, 1057	2.3	0
71	Conformation modification of terthiophene during the on-surface synthesis of pure polythiophene. <i>Nanoscale</i> , <b>2020</b> , 12, 18096-18105	7.7	0

70	V-Shape Molecular Self-Adaption Triggered 2D Self-Assembled Polymorphism by Coadsorption of n-Tetradecane Solvent. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 27643-27650	3.8	5
69	Halogen Substituent Effects on Concentration-Controlled Self-Assembly of Fluorenone Derivatives: Halogen Bond versus Hydrogen Bond. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 4349-4359	3.8	18
68	Bromine Substituent Position Triggered Halogen versus Hydrogen Bond in 2D Self-Assembly of Fluorenone Derivatives. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 26191-26200	3.8	11
67	Growth behaviour of cerium-based conversion coating on Zn-5%Al alloy. <i>Surface and Interface Analysis</i> , <b>2019</b> , 51, 465-474	1.5	4
66	Cooperation and competition of hydrogen and halogen bonds in 2D self-assembled nanostructures based on bromine substituted coumarins. <i>New Journal of Chemistry</i> , <b>2019</b> , 43, 17182-17187	3.6	12
65	Self-Assembly Polymorphism of Regioisomeric Diketopyrrolopyrrole-Based $\pi$ -Conjugated Organic Semiconductors. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 1185-1193	3.8	4
64	Highly efficient separation of surfactant stabilized water-in-oil emulsion based on surface energy gradient and flame retardancy. <i>Journal of Colloid and Interface Science</i> , <b>2018</b> , 520, 1-10	9.3	27
63	Tale of Alkyl Chains: Chain-Length Effect-Directed Formation of Complex Self-Assembly Behaviors at the Liquid/Solid Interface for Unsymmetrically Substituted Fluorenone Derivatives. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 4496-4506	3.8	8
62	An alternative fabrication of underoil superhydrophobic or underwater superoleophobic stainless steel meshes for oil-water separation: Originating from one-step vapor deposition of polydimethylsiloxane. <i>Separation and Purification Technology</i> , <b>2018</b> , 204, 116-126	8.3	34
61	Chiral polymorphism in the self-assemblies of achiral molecules induced by multiple hydrogen bonds. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 11160-11173	3.6	8
60	Concentration-dependent multiple chirality transition in halogen-bond-driven 2D self-assembly process. <i>Applied Surface Science</i> , <b>2018</b> , 433, 1075-1082	6.7	8
59	Same building block, but diverse surface-confined self-assemblies: solvent and concentration effects-induced structural diversity towards chirality and achirality. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 17367-17379	3.6	5
58	Geometry Symmetry of Conjugated Cores along C-Br Bond Effect on the 2D Self-Assembly by Intermolecular H $\cdots$ Br and Br $\cdots$ Br Bonds. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 15338-15343	3.8	6
57	Exploration of Chirality and Achirality of Self-Assembled Monolayer Formed by Unsymmetrically Substituted Fluorenone Derivative at the Liquid/Solid Interface. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1700611	4.6	9
56	Solvent Effect on Host-Guest Two-Dimensional Self-Assembly Mediated by Halogen Bonding. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 22597-22604	3.8	10
55	Halogen bonding versus hydrogen bonding induced 2D self-assembled nanostructures at the liquid-solid interface revealed by STM. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 3143-3150	3.6	24
54	Polymorphic Self-Assemblies of 2,7-Bis(decyloxy)-9-fluorenone at the Solid/Gas Interface: Role of C-H $\cdots$ O $\cdots$ C Hydrogen Bond. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 3947-3957	3.8	18
53	Intermolecular H $\cdots$ O $\cdots$ C bonds induced 2D self-assembly of thiophene based diketopyrrolopyrrole derivative. <i>Surface and Interface Analysis</i> , <b>2017</b> , 49, 735-739	1.5	3

52	One-Step Fabrication of Non-Fluorinated Transparent Super-Repellent Surfaces with Tunable Wettability Functioning in Both Air and Oil. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 15857-15867	9.5	31
51	Eco-friendly preparation of robust superhydrophobic Cu(OH) <sub>2</sub> coating for self-cleaning, oil-water separation and oil sorption. <i>Surface and Coatings Technology</i> , <b>2017</b> , 325, 14-21	4.4	36
50	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. <i>Nanoscale</i> , <b>2017</b> , 9, 237-250	7.7	29
49	A robust superhydrophobic PDMS@ZnSn(OH) <sub>6</sub> coating with under-oil self-cleaning and flame retardancy. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 22761-22771	13	58
48	Effect of Pyridyl Orientation on the Molecular Conformation and Self-Assembled Morphology of Regioisomeric Diketopyrrolopyrrole Derivatives. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 19305-19313	3.8	5
47	One Chain Fixed, One Chain Modified by $\pi$ -5H10 $\pi$ An Efficient Strategy on Fabricating Structural Diversity for 2D Self-Assembly. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 21449-21460	3.8	8
46	Robust and thermal-healing superhydrophobic surfaces by spin-coating of polydimethylsiloxane. <i>Journal of Colloid and Interface Science</i> , <b>2017</b> , 508, 18-27	9.3	54
45	Effects of alkyl chain number and position on 2D self-assemblies. <i>RSC Advances</i> , <b>2017</b> , 7, 32391-32398	3.7	10
44	Two side chains, three supramolecules: exploration of fluorenone derivatives towards crystal engineering. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 19205-19216	3.6	10
43	Cooperating dipole-dipole and van der Waals interactions driven 2D self-assembly of fluorenone derivatives: ester chain length effect. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 31113-31120	3.6	13
42	Hydroxyl versus Carboxyl Substituent: Effects of Competitive and Cooperative Multiple Hydrogen Bonds on Concentration-Controlled Self-Assembly. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 14187-14197	3.8	35
41	STM investigation of structural isomers: alkyl chain position induced self-assembly at the liquid/solid interface. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 624-34	3.6	29
40	Structural transition control between dipole-dipole and hydrogen bonds induced chirality and achirality. <i>CrystEngComm</i> , <b>2016</b> , 18, 3019-3032	3.3	23
39	Effects of the position and number of bromine substituents on the concentration-mediated 2D self-assembly of phenanthrene derivatives. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 7208-15	3.6	20
38	Fabrication of chiral networks for a tri-substituted anthraquinone derivative using molecular self-assembly. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 13164-8	3.6	10
37	STM Exploration of the Diverse Polymorphs for Tri-Substituted Anthraquinone Derivatives via Alkyl Chain Elongation. <i>Advanced Materials Interfaces</i> , <b>2016</b> , 3, 1600428	4.6	6
36	Controllable Orientation of Ester-Group-Induced Intermolecular Halogen Bonding in a 2D Self-Assembly. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 3164-70	6.4	37
35	Chiral Transition of the Supramolecular Assembly by Concentration Modulation at the Liquid/Solid Interface. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 17920-17929	3.8	25

34	Concentration-dependent structure and structural transition from chirality to nonchirality at the liquid-solid interface by coassembly. <i>Nanoscale</i> , <b>2015</b> , 7, 11734-45	7.7	28
33	Self-assembly polymorphism of 2,7-bis-nonyloxy-9-fluorenone: solvent induced the diversity of intermolecular dipole-dipole interactions. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 3627-36	3.6	21
32	Side chain position, length and odd/even effects on the 2D self-assembly of mono-substituted anthraquinone derivatives at the liquid/solid interface. <i>RSC Advances</i> , <b>2015</b> , 5, 93337-93346	3.7	12
31	Concentration dependent halogen-bond density in the 2D self-assembly of a thienophenanthrene derivative at the aliphatic acid/graphite interface. <i>Chemical Communications</i> , <b>2014</b> , 50, 9003-6	5.8	45
30	Two-dimensional self-assembly of single-, poly- and co-crystals at the liquid/solid interface. <i>CrystEngComm</i> , <b>2014</b> , 16, 9690-9696	3.3	9
29	Solvent- and guest-responsive supramolecular self-assembly of 1,3,5-tris(10-carboxydecyloxy) benzene by scanning tunneling microscopy. <i>Applied Surface Science</i> , <b>2014</b> , 313, 841-849	6.7	4
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. <i>Organic Electronics</i> , <b>2014</b> , 15, 2311-2321	3.5	6
27	Steric matching and the concentration induced self-assembled structural variety of 2,7-bis(n-alkoxy)-9-fluorenone at the aliphatic solvent/graphite interface. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 12544-53	3.6	23
26	Designing robust alumina nanowires-on-nanopores structures: superhydrophobic surfaces with slippery or sticky water adhesion. <i>Journal of Colloid and Interface Science</i> , <b>2013</b> , 409, 18-24	9.3	40
25	Room-temperature pulsed laser deposition and dielectric properties of amorphous Bi <sub>3.95</sub> Er <sub>0.05</sub> Ti <sub>3</sub> O <sub>12</sub> thin films on conductive substrates. <i>Applied Physics A: Materials Science and Processing</i> , <b>2013</b> , 111, 1113-1117	2.6	3
24	Strong electron acceptor additive for achieving efficient polymer solar cells with P3HT: PCBM films by a quick drying process. <i>Synthetic Metals</i> , <b>2013</b> , 168, 43-47	3.6	18
23	Dipole-Controlled Self-Assembly of 2,7-Bis(n-alkoxy)-9-fluorenone: OddEven and Chain-Length Effects. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 12707-12714	3.8	46
22	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. <i>Journal of Nanomaterials</i> , <b>2013</b> , 2013, 1-7	3.2	1
21	Hydrogen-bonding-induced polymorphous phase transitions in 2D organic nanostructures. <i>Chemistry - an Asian Journal</i> , <b>2013</b> , 8, 926-33	4.5	31
20	Two-dimensional self-assembly of dendritic amphiphilic molecule with ferrocenyl substituents at the liquid/solid interface. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2013</b> , 13, 1403-5	1.3	1
19	Concentration induced the interfacial self-assembly polymorphism of 4,4'-dihexadecyloxy-benzophenon by scanning tunneling microscopy. <i>Surface and Interface Analysis</i> , <b>2013</b> , 45, 1304-1308	1.5	0
18	Effects of Mn doping on structural and dielectric properties of sol-gel-derived (Ba <sub>0.835</sub> Ca <sub>0.165</sub> )(Zr <sub>0.09</sub> Ti <sub>0.91</sub> )O <sub>3</sub> thin films. <i>Thin Solid Films</i> , <b>2012</b> , 520, 5146-5150	2.2	18
17	Self-Assembly Polymorphism: Solvent-Responsive Two-Dimensional Morphologies of 2,7-Ditridecyloxy-9-fluorenone by Scanning Tunneling Microscopy. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 16014-16022	3.8	35

16	Hydrogen bonds induced supramolecular self-assembly of azobenzene derivatives on the highly oriented pyrolytic graphite surface. <i>Surface Science</i> , <b>2012</b> , 606, L59-L63	1.8	8
15	Self-assembly of dendronized non-planar conjugated molecules on a HOPG surface. <i>Applied Surface Science</i> , <b>2012</b> , 263, 73-78	6.7	10
14	Two-Dimensional Self-Assembled Molecular Structures Formed by the Competition of van der Waals Forces and Dipole-Dipole Interactions. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 1061-1069	3.8	76
13	Effect of bromine and substituted alkyl chain on the interfacial self-assembly of bromobenzene derivatives by scanning tunneling microscopy. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2012</b> , 12, 179-86	1.3	1
12	Solvent-Induced Structural Transitions of a 1,3,5-Tris(10-ethoxycarbonyldecyloxy)benzene Assembly Revealed by Scanning Tunneling Microscopy. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 3358-3367	3.8	34
11	Fabrication of microporous hollow silica spheres templated by NP-10 micelles without calcinations. <i>Applied Surface Science</i> , <b>2011</b> , 257, 2481-2488	6.7	15
10	Two-dimensional self-assembly of esters with different configurations at the liquid-solid interface. <i>Applied Surface Science</i> , <b>2011</b> , 257, 4559-4565	6.7	8
9	Tuning the packing density of host molecular self-assemblies at the solid-liquid interface using guest molecule. <i>Chemical Communications</i> , <b>2010</b> , 46, 8830-2	5.8	29
8	Fabrication of mesoporous silica hollow spheres using triblock copolymer PEG-BPG-BEG as template. <i>Journal of Non-Crystalline Solids</i> , <b>2010</b> , 356, 898-905	3.9	27
7	Characterization and tunneling conductance spectra of N,N'-bis(9H-fluoren-9-ylidene)benzene-1,4-diamine thin films on graphite. <i>Materials Chemistry and Physics</i> , <b>2010</b> , 121, 572-577	4.4	1
6	Synthesis, crystal structures, photophysical properties and self-assembly of fluorene-based bis-Schiff bases. <i>Materials Chemistry and Physics</i> , <b>2010</b> , 124, 1105-1112	4.4	4
5	Two-dimensional self-assembly of a porphyrin-polypyridyl ruthenium(II) hybrid on hopg surface through metal-ligand interactions. <i>ChemPhysChem</i> , <b>2010</b> , 11, 1951-5	3.2	7
4	Influence of hydrogen bonds and double bonds on the alkane and alkene derivatives self-assembled monolayers on HOPG surface: STM observation and computer simulation. <i>Applied Surface Science</i> , <b>2010</b> , 256, 4647-4655	6.7	34
3	An ionic molecular glass as electron injection layer for efficient polymer light-emitting diode. <i>Macromolecular Rapid Communications</i> , <b>2009</b> , 30, 1484-91	4.8	12
2	Adsorption characteristic of self-assembled corrole dimers on HOPG. <i>Surface and Interface Analysis</i> , <b>2009</b> , 41, 225-230	1.5	15
1	First self-assembly study of large $\pi$ -conjugated corrole dimers on solid substrates. <i>Applied Surface Science</i> , <b>2009</b> , 255, 5885-5890	6.7	8