Lian Yu

List of Publications by Year
in descending order

125 papers	8,362 citations	71004 43 h-index	53065 89 g-index
129 all docs	129 docs citations	129 times ranked	5306 citing authors

#	Article	IF	Citations
1	Surface Enrichment of Surfactants in Amorphous Drugs: An X-ray Photoelectron Spectroscopy Study. Molecular Pharmaceutics, 2022, 19, 654-660.	2.3	13
2	Surface diffusion of a glassy discotic organic semiconductor and the surface mobility gradient of molecular glasses. Journal of Chemical Physics, 2022, 156, 094710.	1.2	7
3	Structures of glasses created by multiple kinetic arrests. Journal of Chemical Physics, 2022, 156, 084504.	1.2	3
4	Surface Diffusion Is Controlled by Bulk Fragility across All Glass Types. Physical Review Letters, 2022, 128, 075501.	2.9	13
5	Compositional trends in surface enhanced diffusion in lead silicate glasses. Computational Materials Science, 2022, 206, 111304.	1.4	0
6	Polymorphic selectivity in crystal nucleation. Journal of Chemical Physics, 2022, 156, 144504.	1.2	17
7	Surfactants Accelerate Crystallization of Amorphous Nifedipine by Similar Enhancement of Nucleation and Growth Independent of Hydrophilicâ€“Lipophilic Balance. Molecular Pharmaceutics, 2022, 19, 2343-2350.	2.3	11
8	Solvent-Mediated Polymorphic Transformations in Molten Polymers: The Account of Acetaminophen. Molecular Pharmaceutics, 2022, , .	2.3	1
9	Anisotropic Molecular Organization at a Liquid/Vapor Interface Promotes Crystal Nucleation with Polymorph Selection. Journal of the American Chemical Society, 2022, 144, 11638-11645.	6.6	18
10	Surface Mobility of Amorphous Indomethacin Containing Moisture and a Surfactant: A Concentrationâ€“Temperature Superposition Principle. Molecular Pharmaceutics, 2022, 19, 2962-2970.	2.3	2
11	Surface mobility in amorphous selenium and comparison with organic molecular glasses. Journal of Chemical Physics, 2021, 154, 074703.	1.2	8
12	Amorphous Drugâ€“Polymer Salt with High Stability under Tropical Conditions and Fast Dissolution: The Case of Clofazimine and Poly(acrylic acid). Molecular Pharmaceutics, 2021, 18, 1364-1372.	2.3	21
13	Factors correlating to enhanced surface diffusion in metallic glasses. Journal of Chemical Physics, 2021, 154, 104502.	1.2	6
14	Using Deposition Rate and Substrate Temperature to Manipulate Liquid Crystal-Like Order in a Vapor-Deposited Hexagonal Columnar Glass. Journal of Physical Chemistry B, 2021, 125, 2761-2770.	1.2	17
15	Controlling the Columnar Order in a Discotic Liquid Crystal by Kinetic Arrest of Disc Tumbling. Chemistry of Materials, 2021, 33, 4757-4764.	3.2	13
16	Amorphous Drug-Polymer Salts. Pharmaceutics, 2021, 13, 1271.	2.0	12
17	Amorphous Drugâ€“Polymer Salt with High Stability under Tropical Conditions and Fast Dissolution: The Challenging Case of Lumefantrine-PAA. Journal of Pharmaceutical Sciences, 2021, 110, 3670-3677.	1.6	11
18	Prolific Polymorph Generator ROY in Its Liquid and Glass: Two Conformational Populations Mirroring the Crystalline-State Distribution. Journal of Physical Chemistry B, 2021, 125, 10304-10311.	1.2	7

#	Article	IF	Citations
19	Structures of glass-forming liquids by x-ray scattering: Glycerol, xylitol, and D-sorbitol. Journal of Chemical Physics, 2021, 155, 244508.	1.2	4
20	Effect of Polymers on Crystallization in Glass-Forming Molecular Liquids: Equal Suppression of Nucleation and Growth and Master Curve for Prediction. Crystal Growth and Design, 2020, 20, 237-244.	1.4	23
21	A general method for cultivating single crystals from melt microdroplets. Chemical Communications, 2020, 56, 9950-9953.	2.2	41
22	Polymorphism of Piroxicam: New Polymorphs by Melt Crystallization and Crystal Structure Prediction. Crystal Growth and Design, 2020, 20, 7874-7881.	1.4	27
23	Rich polymorphism in nicotinamide revealed by melt crystallization and crystal structure prediction. Communications Chemistry, 2020, 3, .	2.0	29
24	The Twelfth Solved Structure of ROY: Single Crystals of Y04 Grown from Melt Microdroplets. Crystal Growth and Design, 2020, 20, 7093-7097.	1.4	43
25	A Mechanism for Reversible Solid-State Transitions Involving Nitro Torsion. Chemistry of Materials, 2020, 32, 7754-7765.	3.2	29
26	Atomic-Level Drug Substance and Polymer Interaction in Posaconazole Amorphous Solid Dispersion from Solid-State NMR. Molecular Pharmaceutics, 2020, 17, 2585-2598.	2.3	28
27	Molecular Mechanism of Crystalline-to-Amorphous Conversion of Pharmaceutical Solids from ¹⁹F Magic Angle Spinning NMR. Journal of Physical Chemistry B, 2020, 124, 5271-5283.	1.2	25
28	Over What Length Scale Does an Inorganic Substrate Perturb the Structure of a Glassy Organic Semiconductor?. ACS Applied Materials & Interfaces, 2020, 12, 26717-26726.	4.0	22
29	Surface diffusion in glasses of rod-like molecules posaconazole and itraconazole: effect of interfacial molecular alignment and bulk penetration. Soft Matter, 2020, 16, 5062-5070.	1.2	33
30	Surface dynamics measurement on a gold based metallic glass. Applied Physics Letters, 2020, 116, .	1.5	9
31	Extreme Elasticity Anisotropy: Extreme Elasticity Anisotropy in Molecular Glasses (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlo	7.8	0
32	Molecular Orientation for Vapor-Deposited Organic Glasses Follows Rate-Temperature Superposition: The Case of Posaconazole. Journal of Physical Chemistry B, 2020, 124, 2505-2513.	1.2	19
33	Organic glasses with tunable liquid-crystalline order through kinetic arrest of end-over-end rotation: the case of saperconazole. Soft Matter, 2020, 16, 2025-2030.	1.2	10
34	Rapid improvement in the macrolactins production of Bacillus sp. combining atmospheric room temperature plasma with the specific growth rate index. Journal of Bioscience and Bioengineering, 2020, 130, 48-53.	1.1	3
35	Extreme Elasticity Anisotropy in Molecular Glasses. Advanced Functional Materials, 2020, 30, 2001481.	7.8	12
36	Vapor deposition of a nonmesogen prepares highly structured organic glasses. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21421-21426.	3.3	30

#	Article	IF	Citations
37	Accuracy and reproducibility in crystal structure prediction: the curious case of ROY. CrystEngComm, 2019, 21, 2080-2088.	1.3	55
38	Anisotropic Vapor-Deposited Glasses: Hybrid Organic Solids. Accounts of Chemical Research, 2019, 52, 407-414.	7.6	67
39	Polymer Nanocoating of Amorphous Drugs for Improving Stability, Dissolution, Powder Flow, and Tabletability: The Case of Chitosan-Coated Indomethacin. Molecular Pharmaceutics, 2019, 16, 1305-1311.	2.3	37
40	Solvent-polymer guest exchange in a carbamazepine inclusion complex: structure, kinetics and implication for guest selection. CrystEngComm, 2019, 21, 2164-2173.	1.3	5
41	Vapor-Deposited Glass Structure Determined by Deposition Rateâ€"Substrate Temperature Superposition Principle. Journal of Physical Chemistry Letters, 2019, 10, 3536-3542.	2.1	33
42	Improving Stability and Dissolution of Amorphous Clofazimine by Polymer Nano-Coating. Pharmaceutical Research, 2019, 36, 67.	1.7	13
43	Inhibiting Surface Crystallization and Improving Dissolution of Amorphous Loratadine by Dextran Sulfate Nanocoating. Journal of Pharmaceutical Sciences, 2019, 108, 2391-2396.	1.6	15
44	Origin of Anisotropic Molecular Packing in Vapor-Deposited Alq3 Glasses. Journal of Physical Chemistry Letters, 2019, 10, 164-170.	2.1	49
45	Effect of molecular size and hydrogen bonding on three surface-facilitated processes in molecular glasses: Surface diffusion, surface crystal growth, and formation of stable glasses by vapor deposition. Journal of Chemical Physics, 2019, 150, 024502.	1.2	19
46	Fabrication and characterization of DDAB/PLA-alginate composite microcapsules as single-shot vaccine. RSC Advances, 2018, 8, 13612-13624.	1.7	14
47	Organic Glasses with Tunable Liquid-Crystalline Order. Physical Review Letters, 2018, 120, 055502.	2.9	38
48	Surface Enrichment and Depletion of the Active Ingredient in Spray Dried Amorphous Solid Dispersions. Pharmaceutical Research, 2018, 35, 38.	1.7	25
49	Transâ€"cis isomerization energies of azopyridines: a calorimetric and computational study. Journal of Thermal Analysis and Calorimetry, 2018, 132, 463-469.	2.0	10
50	Gelatin Nano-coating for Inhibiting Surface Crystallization of Amorphous Drugs. Pharmaceutical Research, 2018, 35, 23.	1.7	18
51	Anisotropic organic glasses. Current Opinion in Solid State and Materials Science, 2018, 22, 49-57.	5.6	27
52	Polymorphism of griseofulvin: concomitant crystallization from the melt and a single crystal structure of a metastable polymorph with anomalously large thermal expansion. Chemical Communications, 2018, 54, 358-361.	2.2	58
53	Glass Structure Controls Crystal Polymorph Selection in Vapor-Deposited Films of 4,4â€²-Bis(<i>N</i>-carbazolyl)-1,1â€²-biphenyl. Crystal Growth and Design, 2018, 18, 5800-5807.	1.4	13
54	Crystal nucleation rates in glass-forming molecular liquids: D-sorbitol, D-arabitol, D-xylitol, and glycerol. Journal of Chemical Physics, 2018, 149, 054503.	1.2	43

#	Article	IF	Citations
55	Cross-Nucleation between Polymorphs: Quantitative Modeling of Kinetics and Morphology. Crystal Growth and Design, 2018, 18, 3921-3926.	1.4	12
56	Tensile Fracture of Molecular Glasses Studied by Differential Scanning Calorimetry: Reduction of Heat Capacity by Lateral Constraint. Journal of Physical Chemistry B, 2017, 121, 444-449.	1.2	5
57	Effect of Low-Concentration Polymers on Crystal Growth in Molecular Glasses: A Controlling Role for Polymer Segmental Mobility Relative to Host Dynamics. Journal of Physical Chemistry B, 2017, 121, 1963-1971.	1.2	34
58	Highly Organized Smectic-like Packing in Vapor-Deposited Glasses of a Liquid Crystal. Chemistry of Materials, 2017, 29, 849-858.	3.2	30
59	Simultaneous determination of 13 carbohydrates using highâ€performance anionâ€exchange chromatography coupled with pulsed amperometric detection and mass spectrometry. Journal of Separation Science, 2017, 40, 1843-1854.	1.3	15
60	Nematic-like stable glasses without equilibrium liquid crystal phases. Journal of Chemical Physics, 2017, 146, 054503.	1.2	18
61	Cross-Nucleation between Concomitantly Crystallizing Î±- and Î³-Phases in Polypivalolactone: Secondary Nucleation of One Polymorph on Another. Crystal Growth and Design, 2017, 17, 2639-2645.	1.4	20
62	Surface transport mechanisms in molecular glasses probed by the exposure of nano-particles. Journal of Chemical Physics, 2017, 146, 203324.	1.2	3
63	Vapor-Deposited Glasses with Long-Range Columnar Liquid Crystalline Order. Chemistry of Materials, 2017, 29, 9110-9119.	3.2	25
64	Fast Surface Diffusion and Crystallization of Amorphous Griseofulvin. Journal of Physical Chemistry B, 2017, 121, 9463-9468.	1.2	51
65	Influence of Hydrogen Bonding on the Surface Diffusion of Molecular Glasses: Comparison of Three Triazines. Journal of Physical Chemistry B, 2017, 121, 7221-7227.	1.2	16
66	Polyamorphism of D-mannitol. Journal of Chemical Physics, 2017, 146, 244503.	1.2	29
67	Polymorphs of the antiviral drug ganciclovir. Acta Crystallographica Section C, Structural Chemistry, 2017, 73, 1116-1120.	0.2	3
68	Pair distribution functions of amorphous organic thin films from synchrotron X-ray scattering in transmission mode. IUCrJ, 2017, 4, 555-559.	1.0	11
69	Surface diffusion and surface crystal growth of <i>tris</i>-naphthyl benzene glasses. Journal of Chemical Physics, 2016, 145, .	1.2	32
70	Tuning the Helical Structures of Wellsâ€“Dawson Polyoxometalate Based Hybrid Compounds by Using Isomeric Ligands. Crystal Growth and Design, 2016, 16, 3215-3223.	1.4	34
71	Hydrogen Bonding Slows Down Surface Diffusion of Molecular Glasses. Journal of Physical Chemistry B, 2016, 120, 8007-8015.	1.2	46
72	Surface Mobility of Amorphous <i>o</i>-Terphenyl: A Strong Inhibitory Effect of Low-Concentration Polystyrene. Journal of Physical Chemistry B, 2016, 120, 6842-6847.	1.2	7

#	Article	IF	Citations
73	Surface mobility of molecular glasses and its importance in physical stability. Advanced Drug Delivery Reviews, 2016, 100, 3-9.	6.6	125
74	Surface Diffusion of Polymer Glasses. Macromolecules, 2016, 49, 731-735.	2.2	66
75	Design of simvastatin-loaded polymeric microbubbles as targeted ultrasound contrast agents for vascular imaging and drug delivery in the identification of atherosclerotic plaque. New Journal of Chemistry, 2016, 40, 1256-1262.	1.4	8
76	Vapor deposition of a smectic liquid crystal: highly anisotropic, homogeneous glasses with tunable molecular orientation. Soft Matter, 2016, 12, 2942-2947.	1.2	32
77	Fast Surface Crystallization of Molecular Glasses: Creation of Depletion Zones by Surface Diffusion and Crystallization Flux. Journal of Physical Chemistry B, 2015, 119, 3304-3311.	1.2	33
78	Fast Surface Diffusion of Amorphous <i>o</i>-Terphenyl and Its Competition with Viscous Flow in Surface Evolution. Journal of Physical Chemistry B, 2015, 119, 5071-5078.	1.2	77
79	Possible existence of two amorphous phases of <scp>d</scp>-mannitol related by a first-order transition. Journal of Chemical Physics, 2015, 142, 244504.	1.2	51
80	Fast Crystal Growth in <i>o</i>-Terphenyl Glasses: A Possible Role for Fracture and Surface Mobility. Journal of Physical Chemistry B, 2015, 119, 10124-10130.	1.2	46
81	Molecular modeling of vapor-deposited polymer glasses. Journal of Chemical Physics, 2014, 140, 204504.	1.2	32
82	Coâ€crystallization with Nicotinamide in Two Conformations Lowers Energy but Expands Volume. Journal of Pharmaceutical Sciences, 2014, 103, 2896-2903.	1.6	9
83	Termination of Solid-State Crystal Growth in Molecular Glasses by Fluidity. Journal of Physical Chemistry Letters, 2014, 5, 1705-1710.	2.1	32
84	Fast Surface Crystal Growth on Molecular Glasses and Its Termination by the Onset of Fluidity. Journal of Physical Chemistry B, 2014, 118, 7638-7646.	1.2	45
85	Effect of bulk aging on surface diffusion of glasses. Journal of Chemical Physics, 2014, 140, 054509.	1.2	22
86	Surface Self-Diffusion of Organic Glasses. Journal of Physical Chemistry A, 2013, 117, 13303-13309.	1.1	106
87	Low-Concentration Polymers Inhibit and Accelerate Crystal Growth in Organic Glasses in Correlation with Segmental Mobility. Journal of Physical Chemistry B, 2013, 117, 10334-10341.	1.2	37
88	Study of dynamics and crystallization kinetics of 5-methyl-2-[(2-nitrophenyl)amino]-3-thiophenecarbonitrile at ambient and elevated pressure. Journal of Chemical Physics, 2012, 136, 234509.	1.2	17
89	Fast Crystal Growth Induces Mobility and Tension in Supercooled <i>o</i>-Terphenyl. Journal of Physical Chemistry Letters, 2012, 3, 2562-2567.	2.1	16
90	Formation Enthalpies and Polymorphs of Nicotinamideâ€“<i>R</i>-Mandelic Acid Co-Crystals. Crystal Growth and Design, 2012, 12, 4090-4097.	1.4	25

#	Article	IF	Citations
91	Polymorphism of Nifedipine: Crystal Structure and Reversible Transition of the Metastable Î² Polymorph. Crystal Growth and Design, 2012, 12, 2037-2043.	1.4	62
92	Does Crystal Density Control Fast Surface Crystal Growth in Glasses? A Study with Polymorphs. Crystal Growth and Design, 2011, 11, 3979-3984.	1.4	23
93	Evolution of glassy gratings with variable aspect ratios under surface diffusion. Journal of Chemical Physics, 2011, 134, 194704.	1.2	41
94	Anisotropic Structure and Transformation Kinetics of Vapor-Deposited Indomethacin Glasses. Journal of Physical Chemistry B, 2011, 115, 455-463.	1.2	85
95	Crystallization of Organic Glasses: Effects of Polymer Additives on Bulk and Surface Crystal Growth in Amorphous Nifedipine. Pharmaceutical Research, 2011, 28, 2458-2466.	1.7	71
96	Surface Self-Diffusion of an Organic Glass. Physical Review Letters, 2011, 106, 256103.	2.9	244
97	Glasses crystallize rapidly at free surfaces by growing crystals upward. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5990-5995.	3.3	120
98	Polymorphism in Molecular Solids: An Extraordinary System of Red, Orange, and Yellow Crystals. Accounts of Chemical Research, 2010, 43, 1257-1266.	7.6	307
99	Solubilities of Crystalline Drugs in Polymers: An Improved Analytical Method and Comparison of Solubilities of Indomethacin and Nifedipine in PVP, PVP/VA, and PVAc. Journal of Pharmaceutical Sciences, 2010, 99, 4023-4031.	1.6	212
100	Generality of forming stable organic glasses by vapor deposition. Chemical Physics Letters, 2010, 499, 62-65.	1.2	60
101	Diffusion-controlled and â€œdiffusionlessâ€•crystal growth near the glass transition temperature: Relation between liquid dynamics and growth kinetics of seven ROY polymorphs. Journal of Chemical Physics, 2009, 131, 074506.	1.2	43
102	Physical vapor deposition as a route to hidden amorphous states. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15165-15170.	3.3	82
103	Crystallization near Glass Transition:â€‰ Transition from Diffusion-Controlled to Diffusionless Crystal Growth Studied with Seven Polymorphs. Journal of Physical Chemistry B, 2008, 112, 5594-5601.	1.2	116
104	Hiking down the Energy Landscape:â€‰ Progress Toward the Kauzmann Temperature via Vapor Deposition. Journal of Physical Chemistry B, 2008, 112, 4934-4942.	1.2	192
105	Surface-Enhanced Crystallization of Amorphous Nifedipine. Molecular Pharmaceutics, 2008, 5, 921-926.	2.3	138
106	Crystal growth kinetics exhibit a fragility-dependent decoupling from viscosity. Journal of Chemical Physics, 2008, 128, 034709.	1.2	272
107	Inhibiting Surface Crystallization of Amorphous Indomethacin by Nanocoating. Langmuir, 2007, 23, 5148-5153.	1.6	137
108	Organic Glasses with Exceptional Thermodynamic and Kinetic Stability. Science, 2007, 315, 353-356.	6.0	647

#	Article	IF	Citations
109	Cross-Nucleation between <scp>d</scp>-Mannitol Polymorphs in Seeded Crystallization. Crystal Growth and Design, 2007, 7, 2410-2414.	1.4	66
110	Survival of the fittest polymorph: how fast nucleater can lose to fast grower. CrystEngComm, 2007, 9, 847.	1.3	72
111	Influence of substrate temperature on the stability of glasses prepared by vapor deposition. Journal of Chemical Physics, 2007, 127, 154702.	1.2	165
112	Sudden Rise of Crystal Growth Rate of Nifedipine near Tg without and with Polyvinylpyrrolidone. Journal of Pharmaceutical Sciences, 2007, 96, 1131-1138.	1.6	79
113	Effect of Molecular Chirality on Racemate Stability:Â Î±-Amino Acids with Nonpolar R Groups. Journal of the American Chemical Society, 2006, 128, 1873-1878.	6.6	35
114	Origin of Enhanced Crystal Growth Kinetics nearTgProbed with Indomethacin Polymorphs. Journal of Physical Chemistry B, 2006, 110, 15694-15699.	1.2	89
115	Surface Crystallization of Indomethacin Below T g. Pharmaceutical Research, 2006, 23, 2350-2355.	1.7	182
116	Cross-Nucleation between ROY Polymorphs. Journal of the American Chemical Society, 2005, 127, 17439-17444.	6.6	200
117	Measuring Free-Energy Difference between Crystal Polymorphs through Eutectic Melting. Journal of Physical Chemistry B, 2005, 109, 19915-19922.	1.2	52
118	New Polymorphs of ROY and New Record for Coexisting Polymorphs of Solved Structures. Journal of the American Chemical Society, 2005, 127, 9881-9885.	6.6	204
119	Color Changes Caused by Conformational Polymorphism:Â Optical-Crystallography, Single-Crystal Spectroscopy, and Computational Chemistry. Journal of Physical Chemistry A, 2002, 106, 544-550.	1.1	88
120	Selective Nucleation and Discovery of Organic Polymorphs through Epitaxy with Single Crystal Substrates. Journal of the American Chemical Society, 2001, 123, 10830-10839.	6.6	238
121	Amorphous pharmaceutical solids: preparation, characterization and stabilization. Advanced Drug Delivery Reviews, 2001, 48, 27-42.	6.6	1,183
122	Thermochemistry and Conformational Polymorphism of a Hexamorphic Crystal System. Journal of the American Chemical Society, 2000, 122, 585-591.	6.6	277
123	Inferring thermodynamic stability relationship of polymorphs from melting data. Journal of Pharmaceutical Sciences, 1995, 84, 966-974.	1.6	241
124	Conformational and Color Polymorphism of 5-Methyl-2-[(2-nitrophenyl)amino]-3-thiophenecarbonitrile. Journal of Pharmaceutical Sciences, 1995, 84, 1385-1386.	1.6	57
125	Crystal Energy Landscape of Nifedipine by Experiment and Computer Prediction. Crystal Growth and Design, 0, , .	1.4	5