

Harnessing molecular rotations in plastic crystals: a hold of adaptive soft materials

Chemical Society Reviews

49, 8878-8896

DOI: [10.1039/d0cs00475h](https://doi.org/10.1039/d0cs00475h)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Nuclear magnetic resonance characterisation of ionic liquids and organic ionic plastic crystals: common approaches and recent advances. <i>Chemical Communications</i> , 2021, 57, 5609-5625.	2.2	16
2	Elastic Crystalline Fibers Composed of a Nickel(II) Complex. <i>Inorganic Chemistry</i> , 2021, 60, 1294-1298.	1.9	20
3	Understanding the elastic bending mechanism in a 9,10-anthraquinone crystal through thermal expansion study. <i>CrystEngComm</i> , 2021, 23, 5768-5773.	1.3	11
4	Statics and dynamics of ferroelectric domains in molecular multiaxial ferroelectric (Me ₃ NOH) ₂ [KCo(CN) ₆]. <i>Journal of Materials Chemistry C</i> , 2021, 9, 10741-10748.	2.7	15
5	Photomechanical response of sulfonylhydrazone molecular crystals. <i>CrystEngComm</i> , 2021, 23, 4910-4916.	1.3	10
6	Probing time dependent phase transformation in a flexible metal-organic framework with nanoindentation. <i>Dalton Transactions</i> , 2021, 50, 11380-11384.	1.6	2
7	Potential and challenges of engineering mechanically flexible molecular crystals. <i>CrystEngComm</i> , 2021, 23, 5711-5730.	1.3	33
8	Structural Origins of Elastic and 2D Plastic Flexibility of Molecular Crystals Investigated with Two Polymorphs of Conformationally Rigid Coumarin. <i>Chemistry of Materials</i> , 2021, 33, 1053-1060.	3.2	50
9	Electrotransport and thermal properties of tetrabutylammonium hydrogen sulfate. <i>Ionics</i> , 2021, 27, 2067-2071.	1.2	4
10	Elastic Molecular Crystals: From Serendipity to Design to Applications. <i>Crystal Growth and Design</i> , 2021, 21, 2566-2580.	1.4	56
11	Revisiting the Disorder-Order Transition in 1-X-Adamantane Plastic Crystals: Rayleigh Wing, Boson Peak, and Lattice Phonons. <i>Journal of Physical Chemistry C</i> , 2021, 125, 7384-7391.	1.5	9
12	Energy Conversion in Single-Crystal to Single-Crystal Phase Transition Materials. <i>Advanced Energy Materials</i> , 2022, 12, 2100324.	10.2	25
13	Ultrafast Crystallization of AlPO ₄ -5 Molecular Sieve in a Deep Eutectic Solvent. <i>Journal of Physical Chemistry C</i> , 2021, 125, 8876-8889.	1.5	14
14	Stabilization of Ferroelectric Phase in Highly Oriented Quinuclidinium Perrhenate (HQReO ₄) Thin Films. <i>Materials</i> , 2021, 14, 2126.	1.3	3
15	Elucidating the Origins of a Range of Diverse Flexible Responses in Crystalline Coordination Polymers. <i>Chemistry of Materials</i> , 2021, 33, 3660-3668.	3.2	22
16	Mechanical Bending and Modulation of Photoactuation Properties in a One-Dimensional Pb(II) Coordination Polymer. <i>Chemistry of Materials</i> , 2021, 33, 4621-4627.	3.2	54
17	Autonomous self-repair in piezoelectric molecular crystals. <i>Science</i> , 2021, 373, 321-327.	6.0	72
18	Mechanical Motion in Crystals Triggered by Solid State Photochemical [2+2] Cycloaddition Reaction. <i>Chemistry - an Asian Journal</i> , 2021, 16, 2806-2816.	1.7	30

#	ARTICLE	IF	CITATIONS
19	Recent advances in molecular ferroelectrics. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 033001.	1.3	11
20	Epimers with distinct mechanical behaviours. <i>CrystEngComm</i> , 2021, 23, 5848-5855.	1.3	1
21	Dynamic effects in crystalline coordination polymers. <i>CrystEngComm</i> , 2021, 23, 5738-5752.	1.3	22
22	Pseudo-solid-state electrolytes utilizing the ionic liquid family for rechargeable batteries. <i>Energy and Environmental Science</i> , 2021, 14, 5834-5863.	15.6	42
23	Phase-dependent dielectric properties and proton conduction of neopentyl glycol. <i>RSC Advances</i> , 2021, 11, 23228-23234.	1.7	2
24	Elastic deformability and luminescence of crystals of polyhalogenated platinum(<i>II</i>)-bipyridine complexes. <i>CrystEngComm</i> , 2021, 23, 5891-5898.	1.3	12
25	Dynamics of proton, ion, molecule, and crystal lattice in functional molecular assemblies. <i>Chemical Communications</i> , 2021, 57, 8378-8401.	2.2	19
26	Exploring the diversity of elastic responses of crystalline cadmium(<i>II</i>) coordination polymers: from elastic towards plastic and brittle responses. <i>CrystEngComm</i> , 2021, 23, 7072-7080.	1.3	8
27	Structure-mechanical property relationship of a pentapeptide crystal. <i>CrystEngComm</i> , 2021, 23, 8093-8098.	1.3	0
28	Orientational order and phase transitions in deuterated methane: a neutron total scattering and reverse Monte Carlo study. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 015401.	0.7	4
29	Supercritical anomalies in liquid ODIC-forming cyclooctanol under the strong electric field. <i>Journal of Molecular Liquids</i> , 2022, 345, 117849.	2.3	7
30	Harnessing Noncovalent Interactions for a Directed Evolution of a Six-Component Molecular Crystal. <i>Journal of Physical Chemistry B</i> , 2021, 125, 12584-12591.	1.2	6
31	Effect of Strong Intermolecular Interaction in 2D Inorganic Molecular Crystals. <i>Journal of the American Chemical Society</i> , 2021, 143, 20192-20201.	6.6	9
32	Giant single-crystal-to-single-crystal transformations associated with chiral interconversion induced by elimination of chelating ligands. <i>Nature Communications</i> , 2021, 12, 6908.	5.8	20
33	Organic ionic plastic crystal enhanced interface compatibility of PEO-based solid polymer electrolytes for lithium-metal batteries. <i>Solid State Ionics</i> , 2021, 373, 115806.	1.3	11
34	Luminescent polymorphic crystals: mechanoresponsive and multicolor-emissive properties. <i>CrystEngComm</i> , 2022, 24, 1112-1126.	1.3	36
35	The bending behavior of an L-phenylalanine monohydrate soft crystal via reversible hydrogen bond rupture and remodeling. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 3216-3221.	1.3	2
36	The role of chirality and plastic crystallinity in the optical and mechanical properties of chlorosomes. <i>IScience</i> , 2022, 25, 103618.	1.9	3

#	ARTICLE	IF	CITATIONS
37	The synthesis, structures, high thermal stability and photoluminescence of two new crown ether clathrates. <i>Inorganica Chimica Acta</i> , 2022, 535, 120842.	1.2	4
38	Organic soft crystals exhibiting spontaneously reversible mechano-responsive luminescence. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2022, 51, 100479.	5.6	14
39	Discovering Crystal Forms of the Novel Molecular Semiconductor OEG-BTBT. <i>Crystal Growth and Design</i> , 2022, 22, 1680-1690.	1.4	6
40	Colossal Barocaloric Effect in Carboranes as a Performance Tradeoff. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	18
41	Tailoring the coercive field in ferroelectric metal-free perovskites by hydrogen bonding. <i>Nature Communications</i> , 2022, 13, 794.	5.8	24
42	Multiple Phase Transitions and Temperature Dependent Ionic Conductivity of the Plastic Crystal Trioctylammonium Triflate Studied by Dielectric Spectroscopy and Calorimetry. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2022, , 1-1.	1.8	1
43	Mesophase Transitions in $[(C_2H_5)_4N][FeBrCl_3]$ and $[(CH_3)_4N][FeBrCl_3]$ Ferroic Plastic Crystals. <i>Chemistry of Materials</i> , 2022, 34, 2585-2598.	3.2	5
44	Plastic/Ferroelectric Crystals with Distorted Molecular Arrangement: Ferroelectricity in Bulk Polycrystalline Films through Lattice Reorientation. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	9
45	Altering elastic-plastic mechanical response of a series of isostructural metal-organic complex crystals. <i>Science China Chemistry</i> , 2022, 65, 710-718.	4.2	10
46	Temperature-Reliant Dynamic Properties and Elasto-Plastic to Plastic Crystal (Rotator) Phase Transition in a Metal Oxyacid Salt. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	1
47	Multistimuli-Responsive Dynamic Effects in a One-Dimensional Coordination Polymer. <i>Chemistry of Materials</i> , 2022, 34, 178-185.	3.2	31
48	Low Temperature and High-Pressure Study of Bending L-Leucinium Hydrogen Maleate Crystals. <i>Crystals</i> , 2021, 11, 1575.	1.0	5
49	Temperature-Reliant Dynamic Properties and Elasto-Plastic to Plastic Crystal (Rotator) Phase Transition in a Metal Oxyacid Salt. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	16
50	Multicomponent Crystals with Two Fast Reorienting Constituents Over Perpendicular Noncovalent Axes. <i>Crystal Growth and Design</i> , 2022, 22, 673-680.	1.4	2
51	Structure directing roles of weak noncovalent interactions and charge-assisted hydrogen bonds in the self-assembly of solvated podands: Example of an anion-assisted dimeric water capsule. <i>CrystEngComm</i> , 0, , .	1.3	3
52	Engineering Plastic Phase Transitions via Solid Solutions: The Case of "Reordering Frustration" in Ionic Plastic Crystals of Hydroxyquinuclidinium Salts. <i>Molecular Systems Design and Engineering</i> , 0, , .	1.7	1
53	Premelting Anomalies in Pyromellitic Dianhydride: Negative Thermal Expansion, Accelerated Radiation Damage, and Polymorphic Phase Transition. <i>Journal of Physical Chemistry C</i> , 2022, 126, 7648-7659.	1.5	1
54	Non-Globular Organic Ionic Plastic Crystal Containing a Crown-Ether Moiety " Tuning Its Behaviour Using Sodium Salts. <i>ChemPhysChem</i> , 2022, 23, .	1.0	4

#	ARTICLE	IF	CITATIONS
55	Isomer Selective Thermosaliency and Luminescence Switching in Organic Crystals. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 22650-22657.	4.0	4
56	Multiple Mechanical Behaviors in One Crystal of 2,4-Dichlorophenoxyacetic Acid Form II: Thermomechanical Effect and Elastic Deformation. <i>Crystal Growth and Design</i> , 2022, 22, 3680-3687.	1.4	4
57	Oriental disorder in sulfur hexafluoride: a neutron total scattering and reverse Monte Carlo study. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 295401.	0.7	2
58	Emerging Solid-to-Solid Phase-Change Materials for Thermal Energy Harvesting, Storage, and Utilization. <i>Advanced Materials</i> , 2022, 34, .	11.1	59
59	Phase behaviour of ammonium-bromide-d ₄ under high pressure and low temperature; an average and local structure study. <i>Journal of Physics Condensed Matter</i> , 0, , .	0.7	1
60	Origin of the Large Entropy Change in the Molecular Caloric and Ferroelectric Ammonium Sulfate. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	4
61	Mechanical deformation and multiple thermal restoration of organic crystals: reversible multi-stage shape-changing effect with luminescence-color changes. <i>Chemical Science</i> , 2022, 13, 9544-9551.	3.7	4
62	Resonant phonon modes induced by molecular rotations in $\hat{\pm}$ -pentaerythritol crystals. <i>Journal of Materials Chemistry C</i> , 2022, 10, 14431-14438.	2.7	2
63	Design of Deep Eutectic Systems: Plastic Crystalline Materials as Constituents. <i>Molecules</i> , 2022, 27, 6210.	1.7	2
64	Further adventures of the perovskite family. <i>IUCrj</i> , 2022, 9, 533-535.	1.0	0
65	The First Chiral Inositol Organosilicon Ferroelectric Crystal. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	12
66	The First Chiral Inositol Organosilicon Ferroelectric Crystal. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	0
67	Multi-faceted elastic flexibility of 1-naphthyl and 9-anthryl 2,2':6''-terpyridine crystals. <i>CrystEngComm</i> , 0, , .	1.3	3
68	Organic Crystals with Response to Multiple Stimuli: Mechanical Bending, Acid-Induced Bending and Heating-Induced Jumping. <i>Chemistry - A European Journal</i> , 2023, 29, .	1.7	7
69	Sequence of phase transitions in a model of interacting rods. <i>Physical Review E</i> , 2022, 106, .	0.8	5
70	Flexible metal complex crystals in response to external mechanical stimuli. <i>Coordination Chemistry Reviews</i> , 2023, 475, 214890.	9.5	16
71	Dynamic supramolecular cations in conductive and magnetic [Ni(dmit) ₂] crystals. <i>Coordination Chemistry Reviews</i> , 2023, 475, 214881.	9.5	4
72	Probing Phase Transitions in Organic Crystals Using Atomistic MD Simulations. <i>ACS Physical Chemistry Au</i> , 2023, 3, 84-93.	1.9	6

#	ARTICLE	IF	CITATIONS
73	Plastically Bendable Organic Crystals for Monolithic and Hybrid Micro-Optical Circuits. <i>Advanced Optical Materials</i> , 2023, 11, .	3.6	9
74	Crystal engineering studies of a series of pyridine-3,5-dicarboxamide ligands possessing alkyl ester arms, and their coordination chemistry. <i>Results in Chemistry</i> , 2022, 4, 100679.	0.9	1
75	A New Look at the Structure and Thermal Behavior of Polyvinylidene Fluoride-Camphor Mixtures. <i>Polymers</i> , 2022, 14, 5214.	2.0	3
76	Leveraging Crystalline and Amorphous States of a Metal-Organic Complex for Transformation of the Photosensitive Effect and Positive-Negative Photochromism. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	2
77	Leveraging Crystalline and Amorphous States of a Metal-Organic Complex for Transformation of the Photosensitive Effect and Positive-Negative Photochromism. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	24
78	Ferroelectric Ionic Molecular Crystals with Significant Plasticity and a Low Melting Point: High Performance in Hot-Pressed Polycrystalline Plates and Melt-Grown Crystalline Sheets. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	0
79	High-Tc Quadratic Nonlinear Optical and Dielectric Switchings in Fe-Based Plastic Crystalline Ferroelectric. <i>Inorganic Chemistry</i> , 2022, 61, 20608-20615.	1.9	9
80	Ferroelectric Ionic Molecular Crystals with Significant Plasticity and a Low Melting Point: High Performance in Hot-Pressed Polycrystalline Plates and Melt-Grown Crystalline Sheets. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	5
81	Piezoelectric Response of Plastic Ionic Molecular Crystals: Role of Molecular Rotation. <i>Crystal Growth and Design</i> , 2023, 23, 729-740.	1.4	6
82	Symmetry-Breaking Dendrimer Synthons in Colloidal Crystal Engineering with DNA. <i>Journal of the American Chemical Society</i> , 2023, 145, 841-850.	6.6	4
83	Stimuli-responsive flexible organic crystals. <i>Journal of Materials Chemistry C</i> , 2023, 11, 2026-2052.	2.7	14
84	Aromatic heterocyclic anion based ionic liquids and electrolytes. <i>Physical Chemistry Chemical Physics</i> , 2023, 25, 3502-3512.	1.3	7
85	Ethanol-Induced Condensation and Decondensation in DNA-Linked Nanoparticles: A Nucleosome-like Model for the Condensed State. <i>Journal of the American Chemical Society</i> , 2023, 145, 706-716.	6.6	4
86	Light-driven flagella-like motion of coordination compound single crystals. <i>Chemical Communications</i> , 2023, 59, 4384-4387.	2.2	3
87	Mechanistic View on the Order-Disorder Phase Transition in Amphidynamic Crystals. <i>Journal of Physical Chemistry Letters</i> , 2023, 14, 1570-1577.	2.1	2
88	Rotational Dynamics of Discoid Colloidal Particles in Attractive Quasi-Two-Dimensional Plastic Crystals. <i>Journal of Physical Chemistry Letters</i> , 2023, 14, 2402-2409.	2.1	0
89	Non-stoichiometric carbamazepine cocrystal hydrates of 3,4-/3,5-dihydroxybenzoic acids: coformer-water exchange. <i>Chemical Communications</i> , 2023, 59, 3902-3905.	2.2	1
90	Mechanical properties and peculiarities of molecular crystals. <i>Chemical Society Reviews</i> , 2023, 52, 3098-3169.	18.7	48

#	ARTICLE	IF	CITATIONS
91	Elastic hydrogen-bonded ionic framework. Nano Research, 2023, 16, 10660-10665.	5.8	0
116	Superelastic Behaviors of Molecular Crystals. , 0, , .		0