

Optically Triggered Synchronous Heat Release of Phase Change Energy in Phase-Change Materials at Low Temperature

Advanced Functional Materials

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Solar energy conversion and storage by photoswitchable organic materials in solution, liquid, solid, and changing phases. <i>Journal of Materials Chemistry C</i> , 2021, 9, 11444-11463.	2.7	46
2	Tailoring effects of the chain length and terminal substituent on the photochromism of solid-state spiropyrans. <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 8722-8726.	1.5	6
3	Phase change material-integrated latent heat storage systems for sustainable energy solutions. <i>Energy and Environmental Science</i> , 2021, 14, 4268-4291.	15.6	193
4	Design of phase-transition molecular solar thermal energy storage compounds: compact molecules with high energy densities. <i>Chemical Communications</i> , 2021, 57, 9458-9461.	2.2	31
5	Thermal Energy Harvest and Reutilization by the Combination of Thermal Conducting Reactive Mesogens and Heat-Storage Mesogens. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 13637-13647.	4.0	4
6	Arylazopyrazole-Based Dendrimer Solar Thermal Fuels: Stable Visible Light Storage and Controllable Heat Release. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 22655-22663.	4.0	33
7	Direct Characterization of Thermal Nonequilibrium between Optical and Acoustic Phonons in Graphene Paper under Photon Excitation. <i>Advanced Science</i> , 2021, 8, 2004712.	5.6	12
8	Photoswitchable solvent-free DNA thermotropic liquid crystals toward self-erasable shape information recording biomaterials. <i>Materials Today Bio</i> , 2021, 12, 100140.	2.6	8
9	Mainchain Alternating Azopolymers with Fast Photo-Induced Reversible Transition Behavior. <i>Macromolecules</i> , 2021, 54, 10040-10048.	2.2	19
10	Photoswitchable phase change materials for unconventional thermal energy storage and upgrade. <i>Matter</i> , 2021, 4, 3385-3399.	5.0	46
11	Enhancement of Solar Thermal Fuel by Microphase Separation and Nanoconfinement of a Block Copolymer. <i>Chemistry of Materials</i> , 2021, 33, 9750-9759.	3.2	19
12	Storing energy with molecular photoisomers. <i>Joule</i> , 2021, 5, 3116-3136.	11.7	86
13	Ultra-stable Phase Change Coatings by Self-cross-linkable Reactive Poly(ethylene glycol) and MWCNTs. <i>Advanced Functional Materials</i> , 2022, 32, 2108000.	7.8	31
14	Molecular Solar Thermal Systems towards Phase Change and Visible Light Photon Energy Storage. <i>Small</i> , 2022, 18, e2107473.	5.2	21
15	Functional Unit Construction for Heat Storage by Using Biomass-Based Composite. <i>Frontiers in Chemistry</i> , 2022, 10, 835455.	1.8	2
16	Thermodynamic stability of <i>cis</i> -azobenzene containing DNA materials based on van der Waals forces. <i>Chemical Communications</i> , 2022, 58, 3811-3814.	2.2	5
17	Magnetically tightened form-stable phase change materials with modular assembly and geometric conformality features. <i>Nature Communications</i> , 2022, 13, 1397.	5.8	41
18	Molecular Dynamics Study of Optically Controlled Phase Change Materials. <i>Journal of Physical Chemistry C</i> , 2022, 126, 5443-5456.	1.5	6

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19	Flexible engineering of advanced phase change materials. <i>IScience</i> , 2022, 25, 104226.	1.9	21
20	Preparation of flexible photo-responsive film based on novel photo-liquefiable azobenzene derivative for solar thermal fuel application. <i>Dyes and Pigments</i> , 2022, 202, 110277.	2.0	12
21	Scalable Flexible Phase Change Materials with a Swollen Polymer Network Structure for Thermal Energy Storage. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 59364-59372.	4.0	36
22	Water-resistant conductive organogels with sensation and actuation functions for artificial neurosensory muscular systems. <i>SmartMat</i> , 2022, 3, 632-643.	6.4	12
23	Exploring Next-Generation Functional Organic Phase Change Composites. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	42
24	A rechargeable molecular solar thermal system below 0 °C. <i>Chemical Science</i> , 2022, 13, 6950-6958.	3.7	21
25	Visible Light-Driven Alkyne-Grafted Ethylene-Bridged Azobenzene Chromophores for Photothermal Utilization. <i>Molecules</i> , 2022, 27, 3296.	1.7	1
26	Stimuli-Responsive Organic Phase Change Materials: Molecular Designs and Applications in Energy Storage. <i>Accounts of Materials Research</i> , 2022, 3, 634-643.	5.9	20
27	Azobenzene-Based Solar Thermal Fuels: A Review. <i>Nano-Micro Letters</i> , 2022, 14, .	14.4	28
28	Catalyst-free, reprocessable, intrinsic photothermal phase change materials networks based on conjugated oxime structure. <i>Chemical Engineering Journal</i> , 2022, 450, 138144.	6.6	18
29	Cold crystallization and photo-induced thermal behavior of alkyl-derivatized diarylethene molecules. <i>RSC Advances</i> , 2022, 12, 21926-21931.	1.7	0
30	Supercooled sugar alcohols stabilized by alkali hydroxides for long-term room-temperature phase change solar-thermal energy storage. <i>Chemical Engineering Journal</i> , 2023, 452, 139328.	6.6	4
31	New Wearable Technologies and Devices to Efficiently Scavenge Energy from the Human Body: State of the Art and Future Trends. <i>Energies</i> , 2022, 15, 6639.	1.6	2
32	Photoswitches with different numbers of azo chromophores for molecular solar thermal storage. <i>Soft Matter</i> , 2022, 18, 8840-8849.	1.2	4
33	Photocontrolled Energy Storage in Azobispyrazoles with Exceptionally Large Light Penetration Depths. <i>Journal of the American Chemical Society</i> , 2022, 144, 19430-19436.	6.6	33
34	Waterwheel-inspired high-performance hybrid electromagnetic-triboelectric nanogenerators based on fluid pipeline energy harvesting for power supply systems and data monitoring. <i>Nanotechnology</i> , 2023, 34, 025401.	1.3	17
35	Scalable synthesis of paraffin@MoS ₂ -melamine foam composite phase change materials with superior photo-thermal conversion and storage. <i>Journal of Energy Storage</i> , 2022, 56, 105954.	3.9	10
37	Study on the applicability of photoswitch molecules to optically-controlled thermal energy in different organic phase change materials. <i>Chemical Engineering Journal</i> , 2023, 456, 141051.	6.6	5

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38	Super-flexible phase change materials with a dual-supporting effect for solar thermoelectric conversion in the ocean environment. <i>Journal of Materials Chemistry A</i> , 2022, 11, 341-351.	5.2	9
39	Photoliquefiable Azobenzene Surfactants toward Solar Thermal Fuels that Upgrade Photon Energy Storage via Molecular Design. <i>Small</i> , 2023, 19, .	5.2	4
40	Polyacrylate Backbone Promotes Photoinduced Reversible Solid-To-Liquid Transitions of Azobenzene-Containing Polymers. <i>Macromolecules</i> , 2023, 56, 448-456.	2.2	11
41	Optically Controlled Recovery and Recycling of Homogeneous Organocatalysts Enabled by Photoswitches. <i>Angewandte Chemie</i> , 0, , .	1.6	0
42	Optically Controlled Recovery and Recycling of Homogeneous Organocatalysts Enabled by Photoswitches. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	11
43	Efficient and Robust Molecular Solar Thermal Fabric for Personal Thermal Management. <i>Advanced Materials</i> , 2023, 35, .	11.1	11
44	Wearable Janus-Type Film with Integrated All-Season Active/Passive Thermal Management, Thermal Camouflage, and Ultra-High Electromagnetic Shielding Efficiency Tunable by Origami Process. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	41
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46	High Solar Energy Absorption and Human Body Radiation Reflection Janus Textile for Personal Thermal Management. <i>Advanced Fiber Materials</i> , 2023, 5, 955-967.	7.9	7
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48	Phase Change Thermal Storage Materials for Interdisciplinary Applications. <i>Chemical Reviews</i> , 2023, 123, 6953-7024.	23.0	79
51	Optically-Controlled Variable-Temperature Storage and Upgrade of Thermal Energy by Photoswitchable Phase Change Materials. , 2023, 5, 2019-2027.		6
55	Recent progress in photoinduced transitions between the solid, glass, and liquid states based on molecular photoswitches. <i>Polymer Journal</i> , 2024, 56, 269-282.	1.3	0