

Quantum Chemical Strain Analysis For Mechanochemical

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Force-induced retro-click reaction of triazoles competes with adjacent single-bond rupture. <i>Chemical Science</i> , 2017, 8, 5567-5575.	3.7	20
2	An algorithm to locate optimal bond breaking points on a potential energy surface for applications in mechanochemistry and catalysis. <i>Journal of Chemical Physics</i> , 2017, 147, 152710.	1.2	22
3	Theoretical simulation of the infrared signature of mechanically stressed polymer solids. <i>Beilstein Journal of Organic Chemistry</i> , 2017, 13, 1710-1716.	1.3	6
5	Toward a theory of mechanochemistry: Simple models from the very beginnings. <i>International Journal of Quantum Chemistry</i> , 2018, 118, e25775.	1.0	18
6	Mechanochemistry of nucleosides, nucleotides and related materials. <i>Beilstein Journal of Organic Chemistry</i> , 2018, 14, 955-970.	1.3	68
7	Twist and Return [®] -Induced Ring Strain Triggers Quick Relaxation of a (<i>Z</i>)-Stabilized Cyclobisazobenzene. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 4776-4781.	2.1	17
8	Mechanochemically Gated Photoswitching: Expanding the Scope of Polymer Mechanochromism. <i>Synlett</i> , 2019, 30, 1725-1732.	1.0	19
9	Ultrafast dynamics of highly constrained azobenzene macrocycles. <i>EPL Web of Conferences</i> , 2019, 205, 09002.	0.1	0
10	Implementing the mechanical force into the conceptual DFT framework: understanding and predicting molecular mechanochemical properties. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 7378-7388.	1.3	25
11	Reaction milling for scalable synthesis of N, P-codoped covalent organic polymers for metal-free bifunctional electrocatalysts. <i>Chemical Engineering Journal</i> , 2019, 358, 427-434.	6.6	44
12	The hunt for reactive alkynes in bio-orthogonal click reactions: insights from mechanochemical and conceptual DFT calculations. <i>Chemical Science</i> , 2020, 11, 1431-1439.	3.7	21
13	A mechanochemical model for the simulation of molecules and molecular crystals under hydrostatic pressure. <i>Journal of Chemical Physics</i> , 2020, 153, 134503.	1.2	16
14	The Mechanism of Flex [®] Activation in Mechanophores Revealed By Quantum Chemistry. <i>ChemPhysChem</i> , 2020, 21, 2402-2406.	1.0	7
15	The rupture mechanism of rubredoxin is more complex than previously thought. <i>Chemical Science</i> , 2020, 11, 6036-6044.	3.7	1
16	Strain visualization for strained macrocycles. <i>Chemical Science</i> , 2020, 11, 3923-3930.	3.7	62
17	Tuning the Mechanical Properties of Metallopolymers via Ligand Interactions: A Combined Experimental and Theoretical Study. <i>Macromolecules</i> , 2020, 53, 2021-2030.	2.2	18
18	Quantum chemical modeling of molecules under pressure. <i>International Journal of Quantum Chemistry</i> , 2021, 121, e26208.	1.0	14
19	Mechanochemically Triggered Topology Changes in Expanded Porphyrins. <i>Chemistry - A European Journal</i> , 2021, 27, 3397-3406.	1.7	14

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20	Modeling Molecules under Pressure with Gaussian Potentials. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 583-597.	2.3	17
21	The activation efficiency of mechanophores can be modulated by adjacent polymer composition. <i>RSC Advances</i> , 2021, 11, 7391-7396.	1.7	4
22	The many flavours of mechanochemistry and its plausible conceptual underpinnings. <i>Nature Reviews Chemistry</i> , 2021, 5, 148-167.	13.8	176
23	Mechanical degradation estimation of thermosets by peak shift assessment: General approach using infrared spectroscopy. <i>Polymer</i> , 2021, 221, 123585.	1.8	5
24	Designing Force Probes Based on Reversible 6 π -Electrocyclizations in Polyenes Using Quantum Chemical Calculations. <i>Journal of Organic Chemistry</i> , 2021, 86, 7477-7489.	1.7	5
25	Understanding the Mechanochemistry of Ladder-Type Cyclobutane Mechanophores by Single Molecule Force Spectroscopy. <i>Journal of the American Chemical Society</i> , 2021, 143, 12328-12334.	6.6	26
26	Stress-responsive properties of metallocenes in metallopolymers. <i>Polymer Chemistry</i> , 2021, 12, 2509-2521.	1.9	21
27	Harnessing the Power of Force: Development of Mechanophores for Molecular Release. <i>Journal of the American Chemical Society</i> , 2021, 143, 21461-21473.	6.6	54
29	Acid-free mechanochemical process to enhance the selective recycling of spent LiFePO ₄ batteries. <i>Journal of Hazardous Materials</i> , 2023, 443, 130160.	6.5	28
30	Outstanding Advantages, Current Drawbacks, and Significant Recent Developments in Mechanochemistry: A Perspective View. <i>Crystals</i> , 2023, 13, 124.	1.0	21
31	Effect of confinement and external mechanical force on the cleavage of the bond in a diatomic molecule. <i>Molecular Physics</i> , 0, , .	0.8	0
34	Mechanochemical synthesis of halogenated heterocyclic compounds. <i>Chemistry of Heterocyclic Compounds</i> , 2023, 59, 525-533.	0.6	0
35	Wandering through quantum-mechanochemistry: from concepts to reactivity and switches. <i>Physical Chemistry Chemical Physics</i> , 0, , .	1.3	0