# Tatiana B Kouznetsova

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2748207/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 23 papers | 1,555 citations | 394421 19 h-index | 642732 23 g-index |
| 23 all docs | 23 docs citations | 23 times ranked | 877 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Force-Rate Characterization of Two Spiropyran-Based Molecular Force Probes. Journal of the American Chemical Society, 2015, 137, 6148-6151. | 13.7 | 183 |
| 2 | Inducing and quantifying forbidden reactivity with single-molecule polymer mechanochemistry. Nature Chemistry, 2015, 7, 323-327. | 13.6 | 182 |
| 3 | A backbone lever-arm effect enhances polymer mechanochemistry. Nature Chemistry, 2013, 5, 110-114. | 13.6 | 179 |
| 4 | Toughening hydrogels through force-triggered chemical reactions that lengthen polymer strands. Science, 2021, 374, 193-196. | 12.6 | 124 |
| 5 | A Latent Mechanoacid for Time-Stamped Mechanochromism and Chemical Signaling in Polymeric Materials. Journal of the American Chemical Society, 2020, 142, 99-103. | 13.7 | 110 |
| 6 | Mechanical gating of a mechanochemical reaction cascade. Nature Communications, 2016, 7, 13433. | 12.8 | 107 |
| 7 | Substituent Effects and Mechanism in a Mechanochemical Reaction. Journal of the American Chemical Society, 2018, 140, 12746-12750. | 13.7 | 88 |
| 8 | Mechanically Gated Degradable Polymers. Journal of the American Chemical Society, 2020, 142, 2105-2109. | 13.7 | 85 |
| 9 | Distal conformational locks on ferrocene mechanophores guide reaction pathways for increased mechanochemical reactivity. Nature Chemistry, 2021, 13, 56-62. | 13.6 | 67 |
| 10 | Mechanistic Insights into the Sonochemical Activation of Multimechanophore Cyclopropanated Polybutadiene Polymers. Macromolecules, 2015, 48, 6396-6403. | 4.8 | 61 |
| 11 | Reactivity and Mechanism of a Mechanically Activated anti-Woodwardâ€“Hoffmannâ€“DePuy Reaction. Journal of the American Chemical Society, 2015, 137, 11554-11557. | 13.7 | 56 |
| 12 | Enhanced polymer mechanical degradation through mechanochemically unveiled lactonization. Nature Communications, 2020, 11, 4987. | 12.8 | 48 |
| 13 | Accelerating a Mechanically Driven anti-Woodwardâ€“Hoffmann Ring Opening with a Polymer Lever Arm Effect. Journal of Organic Chemistry, 2015, 80, 11895-11898. | 3.2 | 43 |
| 14 | Mechanism Dictates Mechanics: A Molecular Substituent Effect in the Macroscopic Fracture of a Covalent Polymer Network. Journal of the American Chemical Society, 2021, 143, 3714-3718. | 13.7 | 37 |
| 15 | Single-Molecule Observation of a Mechanically Activated Cis-to-Trans Cyclopropane Isomerization. Journal of the American Chemical Society, 2016, 138, 10410-10412. | 13.7 | 34 |
| 16 | Single-Molecule Activation and Quantification of Mechanically Triggered Palladiumâ€“Carbene Bond Dissociation. Journal of the American Chemical Society, 2021, 143, 1784-1789. | 13.7 | 27 |
| 17 | Substituent Effects in Mechanochemical Allowed and Forbidden Cyclobutene Ring-Opening Reactions. Journal of the American Chemical Society, 2021, 143, 3846-3855. | 13.7 | 26 |
| 18 | Understanding the Mechanochemistry of Ladder-Type Cyclobutane Mechanophores by Single Molecule Force Spectroscopy. Journal of the American Chemical Society, 2021, 143, 12328-12334. | 13.7 | 26 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Combined Constantâ€Force and Constantâ€Velocity Singleâ€Molecule Force Spectroscopy of the Conrotatory Ring Opening Reaction of Benzocyclobutene. ChemPhysChem, 2017, 18, 1486-1489. | 2.1 | 21 |
| 20 | Single-Event Spectroscopy and Unravelling Kinetics of Covalent Domains Based on Cyclobutane Mechanophores. Journal of the American Chemical Society, 2021, 143, 5269-5276. | 13.7 | 20 |
| 21 | Catch and Release: Orbital Symmetry Guided Reaction Dynamics from a Freed â€œTension Trapped Transition Stateâ€. Journal of Organic Chemistry, 2015, 80, 11773-11778. | 3.2 | 14 |
| 22 | Mechanochemical Ring-Opening of Allylic Epoxides. Macromolecules, 2019, 52, 6234-6240. | 4.8 | 14 |
| 23 | Pulling Outward but Reacting Inward: Mechanically Induced Symmetry-Allowed Reactions of cis- and trans-Diester-Substituted Dichlorocyclopropanes. Synlett, 2022, 33, 885-889. | 1.8 | 3 |