Robert GÃ¶stl

List of Publications by Year
in descending order

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70	2,738	186265 28	189892 50
papers	citations	h-index	g-index

76	76	76	2561
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Triazole-Extended Anthracenes as Optical Force Probes. Synlett, 2022, 33, 875-878.	1.8	4
2	Highly Stiff and Stretchable DNA Liquid Crystalline Organogels with Super Plasticity, Ultrafast Selfâ€Healing, and Magnetic Response Behaviors. Advanced Materials, 2022, 34, e2106208.	21.0	19
3	The Mechanochemical Synthesis and Activation of Carbonâ€RichÏ€â€Conjugated Materials. Advanced Science, 2022, 9, e2105497.	11.2	28
4	Confocal Microscopy Visualizes Particleâ€“Crack Interactions in Epoxy Composites with Optical Force Probe-Cross-Linked Rubber Particles. Macromolecules, 2022, 55, 1060-1066.	4.8	8
5	Release of Molecular Cargo from Polymer Systems by Mechanochemistry. Chemistry - A European Journal, 2022, 28, .	3.3	35
6	Microgels as drug carriers for sonopharmacology. Journal of Polymer Science, 2022, 60, 1864-1870.	3.8	18
7	Mechanically Resistant Poly(Nâ€vinylcaprolactam) Microgels with Sacrificial Supramolecular Catechin Hydrogen Bonds. Advanced Science, 2022, 9, e2104004.	11.2	15
8	Mechanoâ€Nanoswitches for Ultrasoundâ€Controlled Drug Activation. Advanced Science, 2022, 9, e2104696.	11.2	20
9	Frontispiece: Release of Molecular Cargo from Polymer Systems by Mechanochemistry. Chemistry - A European Journal, 2022, 28, .	3.3	0
10	Activation of Antibiotic-Grafted Polymer Brushes by Ultrasound. ACS Macro Letters, 2022, 11, 15-19.	4.8	12
11	Microgels react to force: mechanical properties, syntheses, and force-activated functions. Chemical Society Reviews, 2022, 51, 2939-2956.	38.1	23
12	Force ahead: Emerging Applications and Opportunities of Polymer Mechanochemistry. ACS Polymers Au, 2022, 2, 208-212.	4.1	15
13	Reversibly Photoâ€Modulating Mechanical Stiffness and Toughness of Bioengineered Protein Fibers. Angewandte Chemie, 2021, 133, 3259-3265.	2.0	8
14	Kontrolle Ã¼ber die optische und katalytische AktivitÃ¤t gentechnisch hergestellter Proteine mit Ultraschall. Angewandte Chemie, 2021, 133, 1515-1519.	2.0	6
15	Mechanochemical activation of disulfide-based multifunctional polymers for theranostic drug release. Chemical Science, 2021, 12, 1668-1674.	7.4	61
16	Reversibly Photoâ€Modulating Mechanical Stiffness and Toughness of Bioengineered Protein Fibers. Angewandte Chemie - International Edition, 2021, 60, 3222-3228.	13.8	25
17	Controlling Optical and Catalytic Activity of Genetically Engineered Proteins by Ultrasound. Angewandte Chemie - International Edition, 2021, 60, 1493-1497.	13.8	31
18	Reversible regulation of metallo-base-pair interactions for DNA dehybridization by ultrasound. Chemical Communications, 2021, 57, 7438-7440.	4.1	12

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19	Mechanochemical bond scission for the activation of drugs. Nature Chemistry, 2021, 13, 131-139.	13.6	152
20	Mechanochemische Freisetzung nichtkovalent gebundener GÃste aus einem mit Polymerketten dekorierten supramolekularen KÃfig. Angewandte Chemie, 2021, 133, 13738-13742.	2.0	9
21	Innentitelbild: Mechanochemische Freisetzung nichtkovalent gebundener GÃste aus einem mit Polymerketten dekorierten supramolekularen KÃfig (Angew. Chem. 24/2021). Angewandte Chemie, 2021, 133, 13226-13226.	2.0	0
22	Aktivierung der katalytischen AktivitÃt von Thrombin fÃ¼r die Bildung von Fibrin durch Ultraschall. Angewandte Chemie, 2021, 133, 14829-14836.	2.0	1
23	Mechanochemical Release of Nonâ€Covalently Bound Guests from a Polymerâ€Decorated Supramolecular Cage. Angewandte Chemie - International Edition, 2021, 60, 13626-13630.	13.8	39
24	Multicolor Mechanofluorophores for the Quantitative Detection of Covalent Bond Scission in Polymers. Angewandte Chemie - International Edition, 2021, 60, 13287-13293.	13.8	43
25	Machen, zerstÃ¶ren, besser machen. Nachrichten Aus Der Chemie, 2021, 69, 78-79.	0.0	0
26	Activation of the Catalytic Activity of Thrombin for Fibrin Formation by Ultrasound. Angewandte Chemie - International Edition, 2021, 60, 14707-14714.	13.8	35
27	Mehrfarbige Mechanofluorophore fÃ¼r die quantitative Anzeige kovalenter BindungsbrÃ¼che in Polymeren. Angewandte Chemie, 2021, 133, 13398-13404.	2.0	7
28	Ultra-strong bio-glue from genetically engineered polypeptides. Nature Communications, 2021, 12, 3613.	12.8	104
29	Gated Photoreactivity of Pyrene Copolymers in Multiresponsive Cross-Linked starPEG-Hydrogels. ACS Polymers Au, 2021, 1, 59-66.	4.1	8
30	The Mechanochemical Release of Naphthalimide Fluorophores from Î²-Carbonate and Î²-Carbamate Disulfide-Centered Polymers. CCS Chemistry, 2021, 3, 2333-2344.	7.8	23
31	Tailoring the Properties of Optical Force Probes for Polymer Mechanochemistry. Chemistry - A European Journal, 2021, 27, 15889-15897.	3.3	35
32	Tailoring the Properties of Optical Force Probes for Polymer Mechanochemistry. Chemistry - A European Journal, 2021, 27, 15827-15828.	3.3	12
33	Frontispiece: Tailoring the Properties of Optical Force Probes for Polymer Mechanochemistry. Chemistry - A European Journal, 2021, 27, .	3.3	1
34	Fractography of poly(N-isopropylacrylamide) hydrogel networks crosslinked with mechanofluorophores using confocal laser scanning microscopy. Polymer Chemistry, 2020, 11, 358-366.	3.9	38
35	Fabrication and Mechanical Properties of Engineered Proteinâ€Based Adhesives and Fibers. Advanced Materials, 2020, 32, e1906360.	21.0	97
36	DNA hybridization as a general method to enhance the cellular uptake of nanostructures. Nanoscale, 2020, 12, 21299-21305.	5.6	5

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37	Toward Drug Release Using Polymer Mechanochemical Disulfide Scission. Journal of the American Chemical Society, 2020, 142, 14725-14732.	13.7	72
38	Quantifying Rate- and Temperature-Dependent Molecular Damage in Elastomer Fracture. Physical Review X, 2020, 10, .	8.9	35
39	Methods for Exerting and Sensing Force in Polymer Materials Using Mechanophores. ChemPlusChem, 2020, 85, 1092-1092.	2.8	3
40	Going with the Flow: Tunable Flowâ€Induced Polymer Mechanochemistry. Advanced Functional Materials, 2020, 30, 2002372.	14.9	26
41	Polymer mechanochemistry-enabled pericyclic reactions. Polymer Chemistry, 2020, 11, 2274-2299.	3.9	75
42	Engineered Nearâ€Infrared Fluorescent Protein Assemblies for Robust Bioimaging and Therapeutic Applications. Advanced Materials, 2020, 32, e2000964.	21.0	58
43	Shear-Induced Structural and Functional Transformations of Poly(N-vinylcaprolactam) Microgels. ACS Applied Polymer Materials, 2020, 2, 1682-1691.	4.4	23
44	Polymer Mechanochemistry: Going with the Flow: Tunable Flowâ€Induced Polymer Mechanochemistry (Adv. Funct. Mater. 27/2020). Advanced Functional Materials, 2020, 30, 2070180.	14.9	2
45	Methods for Exerting and Sensing Force in Polymer Materials Using Mechanophores. ChemPlusChem, 2020, 85, 1095-1103.	2.8	72
46	Antiâ€Stokes Stress Sensing: Mechanochemical Activation of Tripletâ€“Triplet Annihilation Photon Upconversion. Angewandte Chemie - International Edition, 2019, 58, 12919-12923.	13.8	68
47	Antiâ€Stokesâ€Belastungsanzeige: Mechanochemische Aktivierung der Tripletttâ€Tripletttâ€Annihilierungâ€Photonenâ€Hochkonversion. Angewandte Chemie, 2019, 131, 13051-13055.	2.0	10
48	Fast, Efficient, and Targeted Liposome Delivery Mediated by DNA Hybridization. Advanced Healthcare Materials, 2019, 8, e1900389.	7.6	14
49	Mimicking Active Biopolymer Networks with a Synthetic Hydrogel. Journal of the American Chemical Society, 2019, 141, 1989-1997.	13.7	30
50	Reversible Laser Threshold Modulation in Dithienylethene Conjugated Polymer Blends: A Concept for q-Switching in Organic DFB Lasers. ACS Photonics, 2019, 6, 558-564.	6.6	5
51	A Fluorescent Micro-Optofluidic Sensor for In-Line Ion Selective Electrolyte Monitoring. IEEE Sensors Journal, 2018, 18, 3946-3951.	4.7	4
52	Liquefaction of Biopolymers: Solvent-free Liquids and Liquid Crystals from Nucleic Acids and Proteins. Accounts of Chemical Research, 2017, 50, 1212-1221.	15.6	31
53	Mit molekularen Photoschaltern Materialien kontrollieren. Nachrichten Aus Der Chemie, 2017, 65, 525-529.	0.0	0
54	Nematic DNA Thermotropic Liquid Crystals with Photoresponsive Mechanical Properties. Small, 2017, 13, 1701207.	10.0	32

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55	DNAâ€“surfactant complexes: self-assembly properties and applications. Chemical Society Reviews, 2017, 46, 5147-5172.	38.1	80
56	Optical Sensing of Stress in Polymers. RSC Polymer Chemistry Series, 2017, , 53-75.	0.2	15
57	Light-Gated Chemical Reactions and Catalytic Processes. , 2016, , 167-193.		0
58	ZuverlÃssiges Schalten von Diarylethenen in beide Richtungen mithilfe von sichtbarem Licht. Angewandte Chemie, 2016, 128, 1226-1230.	2.0	20
59	Conditional repair by locally switching the thermal healing capability of dynamic covalent polymers with light. Nature Communications, 2016, 7, 13623.	12.8	87
60	Promoting Mechanochemistry of Covalent Bonds by Noncovalent Micellar Aggregation. ACS Macro Letters, 2016, 5, 995-998.	4.8	47
61	Stress-induced colouration and crosslinking of polymeric materials by mechanochemical formation of triphenylimidazolyl radicals. Chemical Communications, 2016, 52, 8608-8611.	4.1	123
62	Switching Diarylethenes Reliably in Both Directions with Visible Light. Angewandte Chemie - International Edition, 2016, 55, 1208-1212.	13.8	128
63	Ï€-extended anthracenes as sensitive probes for mechanical stress. Chemical Science, 2016, 7, 370-375.	7.4	192
64	Exploring the Conformational Space of Bridgeâ€Substituted Dithienylcyclopentenes. Chemistry - A European Journal, 2015, 21, 14545-14554.	3.3	24
65	Photoreversible Prodrugs and Protags: Switching the Release of Maleimides by Using Light under Physiological Conditions. Chemistry - A European Journal, 2015, 21, 4422-4427.	3.3	36
66	Controlling Covalent Connection and Disconnection with Light. Angewandte Chemie - International Edition, 2014, 53, 8784-8787.	13.8	73
67	Remote-controlling chemical reactions by light: Towards chemistry with high spatio-temporal resolution. Chemical Society Reviews, 2014, 43, 1982.	38.1	309
68	Sterically Crowding the Bridge of Dithienylcyclopentenes for Enhanced Photoswitching Performance. Chemistry - A European Journal, 2012, 18, 14282-14285.	3.3	52
69	Transformations of polycyclic musks AHTN and HHCB upon disinfection with hypochlorite: two new chlorinated disinfection by-products (CDBP) of AHTN and a possible source for HHCB-lactone. Analytical and Bioanalytical Chemistry, 2011, 399, 3579-3588.	3.7	14
70	3,5,5,6,8,8-Hexamethyl-5,6,7,8-tetrahydro-2-naphthoic acid (AHTNâ€“COOH). Acta Crystallographica Section E: Structure Reports Online, 2010, 66, o2687-o2687.	0.2	5