Durga Prasad Karothu

List of Publications by Year
in descending order

64 papers	2,947 citations	186265 28 h-index	175258 52 g-index
64 all docs	64 docs citations	64 times ranked	2036 citing authors

#	Article	IF	Citations
1	Quantifying Mechanical Properties of Molecular Crystals: A Critical Overview of Experimental Elastic Tensors. Angewandte Chemie, 2022, 134, .	2.0	7
2	Quantifying Mechanical Properties of Molecular Crystals: A Critical Overview of Experimental Elastic Tensors. Angewandte Chemie - International Edition, 2022, 61, .	13.8	18
3	Global Analysis of the Mechanical Properties of Organic Crystals. Angewandte Chemie, 2022, 134, .	2.0	19
4	Global Analysis of the Mechanical Properties of Organic Crystals. Angewandte Chemie - International Edition, 2022, 61, .	13.8	55
5	Ultrafast, Light, Soft Martensitic Materials. Advanced Functional Materials, 2022, 32, .	14.9	7
6	Autonomous Reconstitution of Fractured Hybrid Perovskite Single Crystals. Advanced Materials, 2022, 34, e2109374.	21.0	11
7	Exceptionally high work density of a ferroelectric dynamic organic crystal around room temperature. Nature Communications, 2022, 13, .	12.8	15
8	Mechanically robust amino acid crystals as fiber-optic transducers and wide bandpass filters for optical communication in the near-infrared. Nature Communications, 2021, 12, 1326.	12.8	67
9	Organic Molecular Crystals with Dual Stress-Induced Mechanical Response: Elastic and Plastic Flexibility. Crystal Growth and Design, 2021, 21, 1931-1938.	3.0	32
10	Thermosalience of 1,2,4,5â€Tetrachlorobenzene. Israel Journal of Chemistry, 2021, 61, 557-562.	2.3	9
11	Geometrically Reconfigurable, 2D, Allâ€Organic Photonic Integrated Circuits Made from Two Mechanically and Optically Dissimilar Crystals. Advanced Functional Materials, 2021, 31, 2105415.	14.9	54
12	Multifunctional Deformable Organic Semiconductor Single Crystals. Angewandte Chemie - International Edition, 2021, 60, 26151-26157.	13.8	26
13	Mechanically Responsive Crystals: Analysis of Macroscopic Strain Reveals â€œHiddenâ€•Processes. Journal of Physical Chemistry A, 2020, 124, 300-310.	2.5	29
14	Efficient Screening for Ternary Molecular Ionic Cocrystals Using a Complementary Mechanosynthesis and Computational Structure Prediction Approach. Chemistry - A European Journal, 2020, 26, 4752-4765.	3.3	27
15	From Mechanical Effects to Mechanochemistry: Softening and Depression of the Melting Point of Deformed Plastic Crystals. Journal of the American Chemical Society, 2020, 142, 11219-11231.	13.7	16
16	Mechanically Assisted Bioluminescence with Natural Luciferase. Angewandte Chemie - International Edition, 2020, 59, 16485-16489.	13.8	8
17	Mechanically Assisted Bioluminescence with Natural Luciferase. Angewandte Chemie, 2020, 132, 16627.	2.0	3
18	The Rise of the Dynamic Crystals. Journal of the American Chemical Society, 2020, 142, 13256-13272.	13.7	229

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19	Sequencing and Welding of Molecular Singleâ€Crystal Optical Waveguides. Advanced Functional Materials, 2020, 30, 2003443.	14.9	30
20	Mechanical Flexibility of Molecular Crystals Achieved by Exchanging Hydrogen Bonding Synthons. Crystal Growth and Design, 2020, 20, 2847-2852.	3.0	12
21	Efficiently self-healing boronic ester crystals. Chemical Science, 2020, 11, 2606-2613.	7.4	42
22	Global Performance Indices for Dynamic Crystals as Organic Thermal Actuators. Advanced Materials, 2020, 32, e1906216.	21.0	59
23	Micromanipulation of Mechanically Compliant Organic Singleâ€Crystal Optical Microwaveguides. Angewandte Chemie, 2020, 132, 13925-13934.	2.0	30
24	Micromanipulation of Mechanically Compliant Organic Singleâ€Crystal Optical Microwaveguides. Angewandte Chemie - International Edition, 2020, 59, 13821-13830.	13.8	129
25	Cracking under Internal Pressure: Photodynamic Behavior of Vinyl Azide Crystals through N₂ Release. Journal of the American Chemical Society, 2020, 142, 18565-18575.	13.7	23
26	Extraordinary anisotropic thermal expansion in photosalient crystals. IUCrJ, 2020, 7, 83-89.	2.2	39
27	Shape-memory effects in molecular crystals. Nature Communications, 2019, 10, 3723.	12.8	85
28	Thermosalient Amphidynamic Molecular Machines: Motion at the Molecular and Macroscopic Scales. Matter, 2019, 1, 1033-1046.	10.0	81
29	Martensitic organic crystals as soft actuators. Chemical Science, 2019, 10, 7327-7332.	7.4	44
30	Spatial Photocontrol of the Optical Output from an Organic Crystal Waveguide. Journal of the American Chemical Society, 2019, 141, 14966-14970.	13.7	106
31	A filled organic crystal as a hybrid large-bandwidth optical waveguide. Chemical Communications, 2019, 55, 4921-4924.	4.1	31
32	Ist ein gebogener Kristall immer noch ein Einkristall?. Angewandte Chemie, 2019, 131, 10154-10163.	2.0	30
33	Direct Quantification of Rapid and Efficient Single-Stroke Actuation by a Martensitic Transition in a Thermosalient Crystal. Journal of the American Chemical Society, 2019, 141, 3371-3375.	13.7	30
34	Thermochemiluminescent peroxide crystals. Nature Communications, 2019, 10, 997.	12.8	16
35	Is a Bent Crystal Still a Single Crystal?. Angewandte Chemie - International Edition, 2019, 58, 10052-10060.	13.8	95
36	Reversible Multicolor Photochromism of Dihydroazulene Crystals. Chemistry - A European Journal, 2019, 25, 373-378.	3.3	18

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37	Reversible Photolysis of Nitrosobenzene cis-Dimer Monitored In Situ by Single Crystal Photocrystallography. Crystal Growth and Design, 2018, 18, 1293-1296.	3.0	6
38	Crystal Adaptronics: Mechanically Reconfigurable Elastic and Superelastic Molecular Crystals. Angewandte Chemie - International Edition, 2018, 57, 8837-8846.	13.8	214
39	Kristallâ€Adaptronik: Mechanisch rekonfigurierbare elastische und superelastische molekulare Kristalle. Angewandte Chemie, 2018, 130, 8974-8984.	2.0	48
40	Effect of Crystal Packing on the Thermosalient Effect of the Pincerâ€Type Diester Naphthaleneâ€2,3â€diylâ€bis(4â€fluorobenzoate): Aâ€‰New Classâ€…II Thermosalient Solid. Chemistry - A European Journal, 2018, 24, 4133-4139.	3.3	32
41	Dualmodusâ€Lichttransduktion durch einen plastisch biegbaren organischen Kristall als optischer Wellenleiter. Angewandte Chemie, 2018, 130, 17501-17505.	2.0	41
42	Dualâ€Mode Light Transduction through a Plastically Bendable Organic Crystal as an Optical Waveguide. Angewandte Chemie - International Edition, 2018, 57, 17254-17258.	13.8	169
43	Thermally Twistable, Photobendable, Elastically Deformable, and Selfâ€Healable Soft Crystals. Angewandte Chemie, 2018, 130, 8634-8638.	2.0	50
44	Thermally Twistable, Photobendable, Elastically Deformable, and Selfâ€Healable Soft Crystals. Angewandte Chemie - International Edition, 2018, 57, 8498-8502.	13.8	154
45	Turning on Solidâ€State Fluorescence with Light. Angewandte Chemie - International Edition, 2018, 57, 9538-9542.	13.8	6
46	Structural and biological evaluation of halogen derivatives of 1,9-pyrazoloanthrones towards the design of a specific potent inhibitor of c-Jun-N-terminal kinase (JNK). New Journal of Chemistry, 2018, 42, 10651-10660.	2.8	3
47	Anschalten von FestkÃ¶rperfluoreszenz mit Licht. Angewandte Chemie, 2018, 130, 9683-9687.	2.0	1
48	Mechanical and Crystallographic Analysis of Cholesterol Crystals Puncturing Biological Membranes. Chemistry - A European Journal, 2018, 24, 11493-11497.	3.3	14
49	Ionic cocrystals of molecular saccharin. CrystEngComm, 2017, 19, 4338-4344.	2.6	9
50	Mechanistic investigations of the 2-coumaranone chemiluminescence. Physical Chemistry Chemical Physics, 2017, 19, 22852-22859.	2.8	17
51	Shape-Memory and Self-Healing Effects in Mechanosalient Molecular Crystals. Journal of the American Chemical Society, 2016, 138, 13298-13306.	13.7	141
52	Crystals on the move: mechanical effects in dynamic solids. Chemical Communications, 2016, 52, 13941-13954.	4.1	166
53	Using crystal structure prediction to rationalize the hydration propensities of substituted adamantane hydrochloride salts. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2016, 72, 551-561.	1.1	15
54	Modulation of Electronic and Self-Assembly Properties of a Donorâ€“Acceptorâ€“Donor-Based Molecular Materials via Atomistic Approach. ACS Applied Materials & Interfaces, 2015, 7, 670-681.	8.0	22

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55	Differential Cocrystallization Behavior of Isomeric Pyridine Carboxamides toward Antitubercular Drug Pyrazinoic Acid. Crystal Growth and Design, 2015, 15, 858-866.	3.0	18
56	Herringbone to cofacial solid state packing via H-bonding in diketopyrrolopyrrole (DPP) based molecular crystals: influence on charge transport. Chemical Communications, 2015, 51, 97-100.	4.1	56
57	Alkyl chain substituted 1,9-pyrazoloanthrones exhibit prominent inhibitory effect on c-Jun N-terminal kinase (JNK). Organic and Biomolecular Chemistry, 2014, 12, 4656-4662.	2.8	5
58	1,9-Pyrazoloanthrone as a Colorimetric and â€œTurn-Onâ€•Fluorometric Chemosensor: Structural Implications. Crystal Growth and Design, 2014, 14, 2118-2122.	3.0	24
59	N-Alkyl derivative of 1,9-pyrazoloanthrone as a sensor for picric acid. RSC Advances, 2014, 4, 45306-45310.	3.6	7
60	Effect of inductive effect on the formation of cocrystals and eutectics. CrystEngComm, 2014, 16, 9930-9938.	2.6	28
61	Anthrapyrazolone analogues intercept inflammatory JNK signals to moderate endotoxin induced septic shock. Scientific Reports, 2014, 4, 7214.	3.3	6
62	Halogen bonding in fluorine: experimental charge density study on intermolecular Fâ‹¯F and Fâ‹¯S donorâ€“acceptor contacts. Chemical Communications, 2013, 49, 7558.	4.1	117
63	Unique Type II HalogenÂ·Â·Â·Halogen Interactions in Pentafluorophenyl-Appended 2,2â€²-Bithiazoles. Crystal Growth and Design, 2013, 13, 1045-1049.	3.0	46
64	Multifunctional Deformable Organic Semiconductor Single Crystals. Angewandte Chemie, 0, , .	2.0	0