

Dejan-Kresimir Bucar

List of Publications by Year in descending order

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101384

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docs citations

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times ranked

5034
citing authors

#	ARTICLE	IF	CITATIONS
1	Supramolecular Control of Reactivity in the Solid State: From Templates to Ladderanes to Metal-Organic Frameworks. <i>Accounts of Chemical Research</i> , 2008, 41, 280-291.	7.6	613
2	Disappearing Polymorphs Revisited. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 6972-6993.	7.2	281
3	A Practical Guide to the Design of Molecular Crystals. <i>Crystal Growth and Design</i> , 2019, 19, 1426-1453.	1.4	222
4	Accelerated aging: a low energy, solvent-free alternative to solvothermal and mechanochemical synthesis of metal-organic materials. <i>Chemical Science</i> , 2012, 3, 2495-2500.	3.7	181
5	Preparation and Reactivity of Nanocrystalline Cocrystals Formed via Sonocrystallization. <i>Journal of the American Chemical Society</i> , 2007, 129, 32-33.	6.6	150
6	The application of design of experiments (DoE) reaction optimisation and solvent selection in the development of new synthetic chemistry. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 2373-2384.	1.5	141
7	Supramolecular Catalysis in the Organic Solid State through Dry Grinding. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 4273-4277.	7.2	115
8	The curious case of (caffeine)·(benzoic acid): how heteronuclear seeding allowed the formation of an elusive cocrystal. <i>Chemical Science</i> , 2013, 4, 4417.	3.7	115
9	Cocrystals of Caffeine and Hydroxybenzoic Acids Composed of Multiple Supramolecular Heterosynthons: Screening via Solution-Mediated Phase Transformation and Structural Characterization. <i>Crystal Growth and Design</i> , 2009, 9, 1932-1943.	1.4	111
10	Softening and Hardening of Macro- and Nano-Sized Organic Cocrystals in a Single-Crystal Transformation. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 8642-8646.	7.2	92
11	A Supramolecular Protecting Group Strategy Introduced to the Organic Solid State: Enhanced Reactivity through Molecular Pedal Motion. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1037-1041.	7.2	92
12	Thixotropic Hydrogel Derived from a Product of an Organic Solid-State Synthesis: Properties and Densities of Metal-Organic Nanoparticles. <i>Journal of the American Chemical Society</i> , 2011, 133, 3365-3371.	6.6	91
13	Co-Crystals of Caffeine and Hydroxy-2-naphthoic Acids: Unusual Formation of the Carboxylic Acid Dimer in the Presence of a Heterosynthon. <i>Molecular Pharmaceutics</i> , 2007, 4, 339-346.	2.3	90
14	Divergent prebiotic synthesis of pyrimidine and 8-oxo-purine ribonucleotides. <i>Nature Communications</i> , 2017, 8, 15270.	5.8	84
15	Prebiotic selection and assembly of proteinogenic amino acids and natural nucleotides from complex mixtures. <i>Nature Chemistry</i> , 2017, 9, 584-589.	6.6	82
16	Pharmaceutical Nano-Cocrystals: Sonochemical Synthesis by Solvent Selection and Use of a Surfactant. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 7284-7288.	7.2	78
17	Ultrasound-Assisted Construction of Halogen-Bonded Nanosized Cocrystals That Exhibit Thermosensitive Luminescence. <i>Chemistry - A European Journal</i> , 2013, 19, 8213-8219.	1.7	75
18	A "hidden" co-crystal of caffeine and adipic acid. <i>Chemical Communications</i> , 2007, , 525-527.	2.2	74

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19	Template-Controlled Reactivity in the Organic Solid State by Principles of Coordination-Driven Self-Assembly. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 4559-4568.	1.0	74
20	Highly Luminescent Encapsulated Narrow Bandgap Polymers Based on Diketopyrrolopyrrole. <i>Journal of the American Chemical Society</i> , 2018, 140, 1622-1626.	6.6	70
21	Advantages of mechanochemical cocrystallisation in the solid-state chemistry of pigments: colour-tuned fluorescein cocrystals. <i>CrystEngComm</i> , 2013, 15, 6289.	1.3	67
22	A [2+2] cross-photodimerisation of photostable olefins via a three-component cocrystal solid solution. <i>Chemical Communications</i> , 2012, 48, 1790.	2.2	66
23	Modification of luminescent properties of a coumarin derivative by formation of multi-component crystals. <i>CrystEngComm</i> , 2012, 14, 5121.	1.3	59
24	A sildenafil cocrystal based on acetylsalicylic acid exhibits an enhanced intrinsic dissolution rate. <i>CrystEngComm</i> , 2014, 16, 32-35.	1.3	59
25	New opportunities in crystal engineering – the role of atomic force microscopy in studies of molecular crystals. <i>Chemical Communications</i> , 2012, 48, 9210.	2.2	55
26	Sensing and Discrimination of Explosives at Variable Concentrations with a Large-Pore MOF as Part of a Luminescent Array. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 11618-11626.	4.0	54
27	General application of mechanochemistry to templated solid-state reactivity: rapid and solvent-free access to crystalline supermolecules. <i>Chemical Communications</i> , 2008, , 5713.	2.2	52
28	Mechanical Properties of a Series of Macro- and Nanodimensional Organic Cocrystals Correlate with Atomic Polarizability. <i>Journal of the American Chemical Society</i> , 2015, 137, 12768-12771.	6.6	48
29	On the predictability of supramolecular interactions in molecular cocrystals – the view from the bench. <i>CrystEngComm</i> , 2016, 18, 5434-5439.	1.3	47
30	Single-crystal-to-single-crystal direct cross-linking and photopolymerisation of a discrete Ag(N_3) complex to give a 1D polycyclobutane coordination polymer. <i>Chemical Communications</i> , 2013, 49, 1064-1066.	2.2	46
31	Sonocrystallization Yields Monoclinic Paracetamol with Significantly Improved Compaction Behavior. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 249-253.	7.2	46
32	Onion-Shell Metal-Organic Polyhedra (MOPs): A General Approach to Decorate the Exteriors of MOPs using Principles of Supramolecular Chemistry. <i>Journal of the American Chemical Society</i> , 2008, 130, 14366-14367.	6.6	45
33	Stereospecific and quantitative photodimerisation of terminal olefins in the solid state. <i>Chemical Communications</i> , 2010, 46, 4956.	2.2	42
34	Supramolecular Complexes of Sulfadiazine and Pyridines: Reconfigurable Exteriors and Chameleon-like Behavior of Tautomers at the Co-Crystal-Salt Boundary. <i>Crystal Growth and Design</i> , 2013, 13, 393-403.	1.4	41
35	–Click–labeling strategy for $\text{M}(\text{CO})_3$ ($\text{M} = \text{Re}, \text{}^{99\text{m}}\text{Tc}$) prostate cancer targeted Flutamide agents. <i>Dalton Transactions</i> , 2010, 39, 1926.	1.6	37
36	From co-crystals to functional thin films: photolithography using [2+2] photodimerization. <i>Chemical Science</i> , 2013, 4, 4304.	3.7	37

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37	Synthon Hierarchies in Crystal Forms Composed of Theophylline and Hydroxybenzoic Acids: Cocrystal Screening via Solution-Mediated Phase Transformation. <i>Crystal Growth and Design</i> , 2014, 14, 5318-5328.	1.4	37
38	Organic Nanocrystals of the Resorcinarene Hexamer via Sonochemistry: Evidence of Reversed Crystal Growth Involving Hollow Morphologies. <i>Journal of the American Chemical Society</i> , 2012, 134, 6900-6903.	6.6	36
39	Selective prebiotic conversion of pyrimidine and purine anhydronucleosides into Watson-Crick base-pairing arabino-furanosyl nucleosides in water. <i>Nature Communications</i> , 2018, 9, 4073.	5.8	36
40	Are Oxygen and Sulfur Atoms Structurally Equivalent in Organic Crystals?. <i>Crystal Growth and Design</i> , 2017, 17, 827-833.	1.4	35
41	“Masked synthons”™ in crystal engineering: insulated components in acetaminophen cocrystal hydrates. <i>CrystEngComm</i> , 2013, 15, 4816.	1.3	33
42	A 1:1 Cocrystal of Caffeine and 2-Hydroxy-1-Naphthoic Acid Obtained via a Slurry Screening Method. <i>Journal of Chemical Crystallography</i> , 2010, 40, 933-939.	0.5	31
43	A Red Zwitterionic Co-Crystal of Acetaminophen and 2,4-Pyridinedicarboxylic Acid. <i>Journal of Pharmaceutical Sciences</i> , 2010, 99, 3676-3683.	1.6	29
44	Crystal engineering rescues a solution organic synthesis in a cocrystallization that confirms the configuration of a molecular ladder. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 10974-10979.	3.3	29
45	Coding a coordination-driven self-assembly via a hydrogen bond-directed solid-state synthesis: An unexpected chiral tetrahedral capsule. <i>Chemical Communications</i> , 2007, , 1603-1604.	2.2	27
46	The hydrazide/hydrazone click reaction as a biomolecule labeling strategy for M(CO) ₃ (M = Re, ^{99m} Tc) radiopharmaceuticals. <i>Chemical Communications</i> , 2011, 47, 12846.	2.2	27
47	Irreversible <i>endo</i> “Selective Diels–Alder Reactions of Substituted Alkoxyfurans: A General Synthesis of <i>endo</i> “Cantharimides. <i>Chemistry - A European Journal</i> , 2015, 21, 6107-6114.	1.7	27
48	Silver-Free Palladium-Catalyzed C(sp ³)–H Arylation of Saturated Bicyclic Amine Scaffolds. <i>Journal of Organic Chemistry</i> , 2018, 83, 2495-2503.	1.7	27
49	Investigation of the Coordination Interactions of S-(Pyridin-2-ylmethyl)-Cysteine Ligands with M(CO) ₃ (M = Re, ^{99m} Tc). <i>Inorganic Chemistry</i> , 2009, 48, 10625-10634.	1.9	25
50	Doubly Encapsulated Perylene Diimides: Effect of Molecular Encapsulation on Photophysical Properties. <i>Journal of Organic Chemistry</i> , 2020, 85, 207-214.	1.7	25
51	Mechanochemical reactivity inhibited, prohibited and reversed by liquid additives: examples from crystal-form screens. <i>Chemical Science</i> , 2021, 12, 3264-3269.	3.7	25
52	Resorcinol-Templated Synthesis of a Cofacial Terpyridine in Crystalline π-Stacked Columns. <i>Organic Letters</i> , 2011, 13, 2260-2262.	2.4	24
53	Rationalization of the Color Properties of Fluorescein in the Solid State: A Combined Computational and Experimental Study. <i>Chemistry - A European Journal</i> , 2016, 22, 10065-10073.	1.7	24
54	Engineering Molecular Crystals: Backbreaking, yet Gratifying. <i>Crystal Growth and Design</i> , 2017, 17, 2913-2918.	1.4	24

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55	Dramatic Red-Shifted Fluorescence of [2.2]Paracyclophanes with Peripheral Substituents Attached to the Saturated Bridges. <i>Organic Letters</i> , 2009, 11, 5106-5109.	2.4	21
56	A solid-state trimerisation of a diene diacid affords a bicyclobutyl: reactant structure from X-ray powder data and product separation and structure determination via co-crystallisation. <i>Chemical Communications</i> , 2011, 47, 236-238.	2.2	21
57	pH-Controlled Coordination Mode Rearrangements of "Clickable" Huisgen-Based Multidentate Ligands with $[M^{I/II}(CO)_3]^{+}$ (M = Re, ^{99m}Tc). <i>Inorganic Chemistry</i> , 2013, 52, 2939-2950.	1.9	20
58	Unusual reactivity of acetylacetone with imidazole/histamine complexes and (M=Re, ^{99m}Tc). <i>Inorganica Chimica Acta</i> , 2011, 365, 356-362.	1.2	17
59	Selective prebiotic synthesis of phosphoroaminonitriles and aminothioamides in neutral water. <i>Communications Chemistry</i> , 2019, 2, .	2.0	17
60	Organosulfonates aid argentophilic forces in the crystal engineering of [2+2] photodimerisations: reactivity involving 3-pyridyl groups. <i>Supramolecular Chemistry</i> , 2014, 26, 207-213.	1.5	16
61	Verschwendene Polymorphe: eine Neubetrachtung. <i>Angewandte Chemie</i> , 2015, 127, 7076-7098.	1.6	15
62	Crystallization at Solvent Interfaces Enables Access to a Variety of Cocrystal Polymorphs and Hydrates. <i>Crystal Growth and Design</i> , 2018, 18, 3263-3268.	1.4	15
63	Sustainable Synthesis of Chiral Tetrahydrofurans through the Selective Dehydration of Pentoses. <i>Chemistry - A European Journal</i> , 2015, 21, 15947-15950.	1.7	14
64	$ViO_4 \cdot C$ interactions in crystal structures of oxovanadium-coordination compounds. <i>New Journal of Chemistry</i> , 2013, 37, 619-623.	1.4	13
65	Mechanochemical Formation and "Disappearance" of Caffeine "Citric-Acid Cocrystal Polymorphs. <i>Crystal Growth and Design</i> , 2020, 20, 1119-1129.	1.4	13
66	Solid-state photoreactivity of 9-substituted acridizinium bromide salts. <i>CrystEngComm</i> , 2014, 16, 10830-10836.	1.3	12
67	Synthesis of substituted benzoxaborinin-1-ols via palladium-catalysed cyclisation of alkenyl- and alkynyl-boronic acids. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 8039-8043.	1.5	11
68	A lanthanide-based helicate coordination polymer derived from a rigid monodentate organic bridge synthesized in the solid state. <i>New Journal of Chemistry</i> , 2008, 32, 797.	1.4	10
69	A metal-organic framework with three cavities based on three-coloured square tiling derived from a cyclobutane constructed in the solid state. <i>New Journal of Chemistry</i> , 2010, 34, 2400.	1.4	10
70	Synthesis, structural analysis, electrochemical and magnetic properties of tetrachloroferrate ionic liquids. <i>New Journal of Chemistry</i> , 2021, 45, 13429-13440.	1.4	10
71	Functionalised tetrahydrofuran fragments from carbohydrates or sugar beet pulp biomass. <i>Green Chemistry</i> , 2019, 21, 2035-2042.	4.6	9
72	1D and 2D metal-organic frameworks functionalized with free pyridyl groups. <i>Journal of Molecular Structure</i> , 2006, 796, 58-62.	1.8	7

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73	A bis(1-phenyl-1,3-butanedionato)nickel(II) adduct with 3-aminopyridine. Acta Crystallographica Section E: Structure Reports Online, 2003, 59, m985-m987.	0.2	6
74	Opportunities in Nanotechnology via Organic Solid-State Reactivity: Nanostructured Co-Crystals and Molecular Capsules. , 0, , 305-315.		5
75	Bis(dimethyl sulfoxide- $\hat{P}O$)bis(1-phenylbutane-1,3-dionato- $\hat{P}2O, O\hat{a}^2$)nickel(II). Acta Crystallographica Section E: Structure Reports Online, 2004, 60, m367-m369.	0.2	4
76	The first adduct of bis(1,3-diphenyl-1,3-propanedionato)oxovanadium(IV). Acta Crystallographica Section E: Structure Reports Online, 2004, 60, m1920-m1922.	0.2	4
77	Applications of hydrogen-bond-acceptor templates to direct \hat{a} -in-phase \hat{a}^TM reactivity of a diene diacid in the solid state. Photochemical and Photobiological Sciences, 2011, 10, 1384-1386.	1.6	4
78	Mechanistic In Situ and Ex Situ Studies of Phase Transformations in Molecular Co \hat{a} Crystals. Chemistry - A European Journal, 2020, 26, 14645-14653.	1.7	4
79	Sonochemical synthesis of nano-cocrystals. Proceedings of Meetings on Acoustics, 2013, , .	0.3	2
80	Professor William Jones and His Materials Chemistry Group: Innovations and Advances in the Chemistry of Solids. Crystal Growth and Design, 2019, 19, 1479-1487.	1.4	2
81	Crystal surface defects as possible origins of cocrystal dissociation. CrystEngComm, 2022, 24, 5031-5035.	1.3	2
82	Bis(adamantylamine- $\hat{P}N$)bis(1-phenylbutane-1,3-dionato- $\hat{P}2O, O\hat{a}^2$)nickel(II). Acta Crystallographica Section E: Structure Reports Online, 2005, 61, m522-m524.	0.2	1
83	Self-assembly of bis(1,3-diphenylpropane-1,3-dionato- $\hat{P}2O, O\hat{a}^2$)bis(thiomorpholine- $\hat{P}N$)cobalt(II). Acta Crystallographica Section E: Structure Reports Online, 2006, 62, m283-m285.	0.2	1
84	Quasi self-inclusion of a 1-D coordination polymer within a 2-D hydrogen-bonded grid: a chaperone effect. Journal of Coordination Chemistry, 2021, 74, 162-168.	0.8	1
85	Inverted metal \hat{a} organic frameworks: isorecticular decoration with organic anions using principles of supramolecular chemistry. Journal of Coordination Chemistry, 2021, 74, 169-177.	0.8	1
86	Crystal and Molecular Structure of trans-1,2-bis(2-benzothiazolyl)ethene. Journal of Chemical Crystallography, 2007, 37, 713-715.	0.5	0