

Rafel Prohens

List of Publications by Year in descending order

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papers

2,513
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218592

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docs citations

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2924
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| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Oxyma: An Efficient Additive for Peptide Synthesis to Replace the Benzotriazole-Based HOBT and HOAT with a Lower Risk of Explosion [1]. Chemistry - A European Journal, 2009, 15, 9394-9403. | 1.7 | 326 |
| 2 | COMU: A Safer and More Effective Replacement for Benzotriazole-Based Uronium Coupling Reagents. Chemistry - A European Journal, 2009, 15, 9404-9416. | 1.7 | 260 |
| 3 | Virtual cocrystal screening. Chemical Science, 2011, 2, 883. | 3.7 | 245 |
| 4 | Squaramido-based receptors: Molecular recognition of carboxylate anions in highly competitive media. Tetrahedron Letters, 1998, 39, 1063-1066. | 0.7 | 88 |
| 5 | A squaramide fluorescent ensemble for monitoring sulfate in water. Chemical Communications, 2001, , 1456-1457. | 2.2 | 77 |
| 6 | Squaramido-Based Receptors: Design, Synthesis, and Application to the Recognition of Tetraalkylammonium Compounds. Journal of Organic Chemistry, 1996, 61, 9394-9401. | 1.7 | 73 |
| 7 | A theoretical study of aromaticity in squaramide complexes with anions. Chemical Physics Letters, 2002, 351, 115-120. | 1.2 | 57 |
| 8 | Application of heparin as a dual agent with antimalarial and liposome targeting activities toward Plasmodium-infected red blood cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2014, 10, 1719-1728. | 1.7 | 55 |
| 9 | Polymorphism of Norfloxacin: Evidence of the Enantiotropic Relationship between Polymorphs A and B. Crystal Growth and Design, 2006, 6, 1463-1467. | 1.4 | 52 |
| 10 | An Effective Fluorescent Sensor for Choline-Containing Phospholipids. Angewandte Chemie - International Edition, 1999, 38, 2208-2211. | 7.2 | 49 |
| 11 | Virtual Screening Identifies New Cocrystals of Nalidixic Acid. Crystal Growth and Design, 2014, 14, 1749-1755. | 1.4 | 49 |
| 12 | Adaptation of targeted nanocarriers to changing requirements in antimalarial drug delivery. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 515-525. | 1.7 | 49 |
| 13 | A new polymorph of Norfloxacin. Journal of Thermal Analysis and Calorimetry, 2007, 89, 687-692. | 2.0 | 46 |
| 14 | Thermodynamic characterization of the squaramide-carboxylate interaction in squaramide receptors. Tetrahedron Letters, 2001, 42, 4933-4936. | 0.7 | 44 |
| 15 | Thermodynamics of Cd ²⁺ and Zn ²⁺ binding by the phytochelatin (Î ³ -Glu-Cys) ₄ -Gly and its precursor glutathione. Analytical Biochemistry, 2008, 375, 82-89. | 1.1 | 41 |
| 16 | Modulation of Reactivity in the Cavity of Liposomes Promotes the Formation of Peptide Bonds. Journal of the American Chemical Society, 2015, 137, 12269-12275. | 6.6 | 39 |
| 17 | Cocrystals of spironolactone and griseofulvin based on an in silico screening method. CrystEngComm, 2017, 19, 3592-3599. | 1.3 | 39 |
| 18 | Competitive Binding of Cd and Zn with the Phytochelatin (Î ³ -Glu-Cys) ₄ -Gly: Comparative Study by Mass Spectrometry, Voltammetry-Multivariate Curve Resolution, and Isothermal Titration Calorimetry. Environmental Science & Technology, 2008, 42, 2860-2866. | 4.6 | 38 |

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|----|--|-----|-----------|
| 19 | Polymorphism of Cocrystals: The Promiscuous Behavior of Agomelatine. <i>Crystal Growth and Design</i> , 2016, 16, 1063-1070. | 1.4 | 38 |
| 20 | Combined Virtual/Experimental Multicomponent Solid Forms Screening of Sildenafil: New Salts, Cocrystals, and Hybrid Saltâ€“Cocrystals. <i>Crystal Growth and Design</i> , 2018, 18, 7618-7627. | 1.4 | 35 |
| 21 | H-Bonded anionâ€“anion complex trapped in a squaramido-based receptor. <i>Chemical Communications</i> , 2018, 54, 1841-1844. | 2.2 | 32 |
| 22 | Molecular Architecture of the Mn ²⁺ -dependent Lactonase UlaG Reveals an RNase-like Metallo-Î²-lactamase Fold and a Novel Quaternary Structure. <i>Journal of Molecular Biology</i> , 2010, 398, 715-729. | 2.0 | 31 |
| 23 | Quaternary Structural Transitions in the DeoR-Type Repressor UlaR Control Transcriptional Readout from the <i>scp</i> -Ascorbate Utilization Regulon in <i>Escherichia coli</i> . <i>Biochemistry</i> , 2008, 47, 11424-11433. | 1.2 | 30 |
| 24 | Kâ€“Oxyma: a Strong Acylationâ€“Promoting, 2â€“CTC Resinâ€“Friendly Coupling Additive. <i>European Journal of Organic Chemistry</i> , 2013, 2013, 6372-6378. | 1.2 | 29 |
| 25 | New polymorphic hydrogen bonding donorâ€“acceptor system with two temperature coincident solidâ€“solid transitions. <i>CrystEngComm</i> , 2009, 11, 52-54. | 1.3 | 27 |
| 26 | H-Bonded anionâ€“anion complexes in fentanyl citrate polymorphs and solvates. <i>Chemical Communications</i> , 2019, 55, 115-118. | 2.2 | 26 |
| 27 | Experimental and Theoretical Study of Aromaticity Effects in the Solid State Architecture on Squaric Acid Derivatives. <i>Crystal Growth and Design</i> , 2014, 14, 2578-2587. | 1.4 | 24 |
| 28 | DNA structure directs positioning of the mitochondrial genome packaging protein Abf2p. <i>Nucleic Acids Research</i> , 2017, 45, 951-967. | 6.5 | 23 |
| 29 | Effect of Preorganization on the Polymorphism and Cocrystallization of a Squaramide Compound. <i>Crystal Growth and Design</i> , 2012, 12, 4548-4553. | 1.4 | 22 |
| 30 | Cooperative induction in double H-bonding donor/acceptor compounds: Chains vs. ribbons. <i>CrystEngComm</i> , 2012, 14, 5745. | 1.3 | 22 |
| 31 | The Ca ²⁺ â€“EDTA chelation as standard reaction to validate Isothermal Titration Calorimeter measurements (ITC). <i>Talanta</i> , 2016, 154, 354-359. | 2.9 | 22 |
| 32 | Calorimetric Studies of Binary and Ternary Molecular Interactions between Transthyretin, AÎ² Peptides, and Small-Molecule Chaperones toward an Alternative Strategy for Alzheimerâ€™s Disease Drug Discovery. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 3205-3214. | 2.9 | 22 |
| 33 | A Novel, Extremely Bioavailable Cocrystal of Pterostilbene. <i>Crystal Growth and Design</i> , 2021, 21, 2315-2323. | 1.4 | 22 |
| 34 | Ziprasidone malate, a new trimorphic salt with improved aqueous solubility. <i>CrystEngComm</i> , 2009, 11, 791. | 1.3 | 21 |
| 35 | Solid form and solubility. <i>CrystEngComm</i> , 2017, 19, 23-26. | 1.3 | 19 |
| 36 | DFT Analysis of Uncommon Î•â€“H-Bond Array Interaction in a New Pterostilbene/Theophylline Cocrystal. <i>Crystal Growth and Design</i> , 2020, 20, 6691-6698. | 1.4 | 19 |

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| 37 | Revisiting the Solid State of Norfloxacin. <i>Crystal Growth and Design</i> , 2010, 10, 2948-2953. | 1.4 | 18 |
| 38 | Safety Evaluation of an Unexpected Incident with a Nitro Compound. <i>Organic Process Research and Development</i> , 2007, 11, 1131-1134. | 1.3 | 17 |
| 39 | Cooperativity in Solid-State Squaramides. <i>Crystal Growth and Design</i> , 2011, 11, 3725-3730. | 1.4 | 17 |
| 40 | Self-Assembling of Zwitterionic Squaramides through Electrostatically Compressed Face-to-Face π -Stacking: A New Supramolecular Synthron. <i>Crystal Growth and Design</i> , 2013, 13, 4200-4203. | 1.4 | 17 |
| 41 | Polymorphism of Sildenafil: A New Metastable Desolvate. <i>Crystal Growth and Design</i> , 2018, 18, 3740-3746. | 1.4 | 17 |
| 42 | DNA specificities modulate the binding of human transcription factor A to mitochondrial DNA control region. <i>Nucleic Acids Research</i> , 2019, 47, 6519-6537. | 6.5 | 17 |
| 43 | New Cocrystal of Ubiquinol with High Stability to Oxidation. <i>Crystal Growth and Design</i> , 2020, 20, 5583-5588. | 1.4 | 16 |
| 44 | Synthesis and Characterization of a New Norfloxacin/Resorcinol Cocrystal with Enhanced Solubility and Dissolution Profile. <i>Pharmaceutics</i> , 2022, 14, 49. | 2.0 | 16 |
| 45 | Single-Stranded Molecular Helical Assembly from a Self-Complementary Squaramide Compound. <i>Crystal Growth and Design</i> , 2014, 14, 397-400. | 1.4 | 15 |
| 46 | Sildenafil-Resorcinol Cocrystal: XRPD Structure and DFT Calculations. <i>Crystals</i> , 2020, 10, 1126. | 1.0 | 15 |
| 47 | Targeting transthyretin in Alzheimer's disease: Drug discovery of small-molecule chaperones as disease-modifying drug candidates for Alzheimer's disease. <i>European Journal of Medicinal Chemistry</i> , 2021, 226, 113847. | 2.6 | 15 |
| 48 | Polymorphism in secondary squaramides: on the importance of π -interactions involving the four membered ring. <i>CrystEngComm</i> , 2018, 20, 237-244. | 1.3 | 14 |
| 49 | Experimental and theoretical study of weak intermolecular interactions in crystalline tertiary squaramides. <i>CrystEngComm</i> , 2016, 18, 6437-6443. | 1.3 | 13 |
| 50 | Water wires in the nanoporous form II of carbamazepine: a single-crystal X-ray diffraction analysis. <i>CrystEngComm</i> , 2013, 15, 845-847. | 1.3 | 12 |
| 51 | Morphotropism and "Quasi-Isostructurality" in the Three High $Z \times 2$ Concomitant Polymorphs of Efinaconazole. <i>Crystal Growth and Design</i> , 2020, 20, 4238-4242. | 1.4 | 11 |
| 52 | A New and Highly Stable Cocrystal of Vitamin D3 for Use in Enhanced Food Supplements. <i>Crystal Growth and Design</i> , 2021, 21, 1418-1423. | 1.4 | 11 |
| 53 | A cocrystal is the key intermediates for the production of a new polymorph of Vorinostat. <i>CrystEngComm</i> , 2012, 14, 362-365. | 1.3 | 10 |
| 54 | Gallic Acid Dimer As a Double "Hole Donor: Evidence from X-ray, Theoretical Calculations, and Generalization from the Cambridge Structural Database. <i>Crystal Growth and Design</i> , 2019, 19, 3989-3997. | 1.4 | 10 |

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| 55 | Hydrogen Bond Polarization Overcomes Unfavorable Packing in the Most Stable High Z ² Polymorph of Pterostilbene. <i>Crystal Growth and Design</i> , 2019, 19, 2552-2556. | 1.4 | 10 |
| 56 | A late appearing polymorph of nutraceutical pterostilbene. <i>CrystEngComm</i> , 2020, 22, 4680-4684. | 1.3 | 10 |
| 57 | Polymorphism in the 1/1 Pterostilbene/Picolinic Acid Cocrystal. <i>Crystal Growth and Design</i> , 2022, 22, 590-597. | 1.4 | 10 |
| 58 | X-Ray structure of the 1:1 complex of a tripodal receptor and cis-cyclohexane-1,3,5-tricarboxylic acid. <i>Chemical Communications</i> , 1997, , 357-358. | 2.2 | 9 |
| 59 | Two New Polymorphic Cocrystals of Zafirlukast: Preparation, Crystal Structure, and Stability Relations. <i>Crystal Growth and Design</i> , 2015, 15, 4162-4169. | 1.4 | 9 |
| 60 | Expanding the Crystal Form Landscape of the Antiviral Drug Adefovir Dipivoxil. <i>Crystal Growth and Design</i> , 2015, 15, 475-484. | 1.4 | 9 |
| 61 | A combined crystallographic and theoretical study of weak intermolecular interactions in crystalline squaric acid esters and amides. <i>CrystEngComm</i> , 2017, 19, 3071-3077. | 1.3 | 9 |
| 62 | Hydrogen bonding <i>versus</i> π - π interactions: their key competition in sildenafil solvates. <i>CrystEngComm</i> , 2018, 20, 4526-4530. | 1.3 | 9 |
| 63 | Novel Polymorphic Cocrystals of the Non-Steroidal Anti-Inflammatory Drug Niflumic Acid: Expanding the Pharmaceutical Landscape. <i>Pharmaceutics</i> , 2021, 13, 2140. | 2.0 | 9 |
| 64 | Mechanistic Understanding of Competitive Destabilization of Carbamazepine Cocrystals under Solvent Free Conditions. <i>Crystal Growth and Design</i> , 2020, 20, 6024-6029. | 1.4 | 7 |
| 65 | Combination of chemometrically assisted voltammetry, calorimetry, and circular dichroism as a new method for the study of bioinorganic substances: application to selenocystine metal complexes. <i>Journal of Biological Inorganic Chemistry</i> , 2012, 17, 321-329. | 1.1 | 6 |
| 66 | Crystal structure solution of an elusive polymorph of Dibenzylsquaramide. <i>Powder Diffraction</i> , 2013, 28, S470-S480. | 0.4 | 6 |
| 67 | Property prediction and pharmacokinetic evaluation of mixed stoichiometry cocrystals of zafirlukast, a drug delivery case study. <i>CrystEngComm</i> , 2018, 20, 1346-1351. | 1.3 | 6 |
| 68 | The Solid State Landscape of the Sildenafil Drug. <i>Journal of Pharmaceutical Sciences</i> , 2022, 111, 1104-1109. | 1.6 | 6 |
| 69 | Solid-State Competitive Destabilization of Caffeine Malonic Acid Cocrystal: Mechanistic and Kinetic Investigations. <i>Crystal Growth and Design</i> , 2020, 20, 7598-7605. | 1.4 | 5 |
| 70 | Polymorphism of (S)-triphenylglycol: kinetic dependent transformation of a new multipolymorphic system. <i>Chemical Communications</i> , 2007, , 3538. | 2.2 | 4 |
| 71 | An improved methodology to compute surface site interaction points using high density molecular electrostatic potential surfaces. <i>Journal of Computational Chemistry</i> , 2018, 39, 2371-2377. | 1.5 | 4 |
| 72 | An Assay for Screening Potential Drug Candidates for Alzheimer's Disease That Act as Chaperones of the Transthyretin and Amyloid β Peptides Interaction. <i>Chemistry - A European Journal</i> , 2020, 26, 17462-17469. | 1.7 | 4 |

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|----|--|-----|-----------|
| 73 | Crystal engineering of nutraceutical phytosterols: new cocrystal solid solutions. <i>CrystEngComm</i> , 2020, 22, 4210-4214. | 1.3 | 4 |
| 74 | Assembling the Puzzle of Apixaban Solid Forms. <i>Molecular Pharmaceutics</i> , 2018, 15, 1909-1916. | 2.3 | 3 |
| 75 | Computational screens can speed up the discovery of pharmaceutical cocrystals. <i>ADMET and DMPK</i> , 2018, 6, 284-287. | 1.1 | 3 |
| 76 | Static discrete disorder in the crystal structure of iododiflunisal: on the importance of hydrogen bond, halogen bond and π -stacking interactions. <i>CrystEngComm</i> , 0, , . | 1.3 | 3 |
| 77 | A surface site interaction point methodology for macromolecules and huge molecular databases. <i>Journal of Computational Chemistry</i> , 2017, 38, 419-426. | 1.5 | 2 |
| 78 | Derisking Development by a Cocrystallization Screen of a Novel Selective Inhaled JAK-STAT inhibitor. <i>Crystal Growth and Design</i> , 2019, 19, 403-414. | 1.4 | 2 |
| 79 | Potentiometric CheqSol and standardized shake-flask solubility methods are complimentary tools in physicochemical profiling. <i>European Journal of Pharmaceutical Sciences</i> , 2020, 148, 105305. | 1.9 | 2 |
| 80 | Combined crystallographic and computational investigation of the solvent disorder present in a new tipiracil hydrochloride methanol solvate hydrate. <i>CrystEngComm</i> , 0, , . | 1.3 | 1 |
| 81 | Revision of the Crystal Structure of the Orthorhombic Polymorph of Oxyma: On the Importance of π -Hole Interactions and Their Interplay with H-Bonds. <i>Crystals</i> , 2022, 12, 823. | 1.0 | 1 |