

# GÃ©rard Coquerel

## List of Publications by Year in descending order

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109  
papers

2,319  
citations

201674

27  
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276875

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115  
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115  
docs citations

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times ranked

1683  
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of Cooling Profile on Refined Palm Oil Crystallization: Microscopic and Small and Wideâ€Angle Xâ€Ray Scattering Investigations. <i>European Journal of Lipid Science and Technology</i> , 2022, 124, 2100045.	1.5	1
2	Continuous chiral resolution of racemic Ibuprofen by diastereomeric salt formation in a Couette-Taylor crystallizer. <i>Chemical Engineering Research and Design</i> , 2022, 178, 95-110.	5.6	8
3	Orderâ€Disorder Phase Transition between High- and Low- <i>Z</i> â€ Crystal Structures of the <i>P</i> <sub>1</sub> Space Group. <i>Crystal Growth and Design</i> , 2022, 22, 2230-2238.	3.0	5
4	Complex structures arising from the self-assembly of a simple organic salt. <i>Nature</i> , 2021, 590, 275-278.	27.8	34
5	Cocrystals of Praziquantel: Discovery by Network-Based Link Prediction. <i>Crystal Growth and Design</i> , 2021, 21, 3428-3437.	3.0	24
6	Impact of a Partial Solid Solution and Water Molecules on the Formation of Fibrous Crystals and Fluid Inclusions. <i>Crystals</i> , 2021, 11, 1188.	2.2	4
7	Solid-State Overview of R-Baclofen: Relative Stability of Forms A, B and C and Characterization of a New Heterosolvate. <i>Journal of Pharmaceutical Sciences</i> , 2021, 110, 3457-3463.	3.3	5
8	Impact of chirality on the amorphous state of conglomerate forming systems: a case study of <i>N</i> -acetyl- <i>l</i> -methylbenzylamine. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 24282-24293.	2.8	2
9	Nucleation behaviour of racemic and enantiopure histidine. <i>CrystEngComm</i> , 2021, 23, 8379-8385.	2.6	3
10	Potassium Sulfate: A New Candidate to Explore Non-Photochemical Laser-Induced Nucleation Mechanisms. <i>Crystals</i> , 2021, 11, 1571.	2.2	1
11	Optimization of an Antisolvent Method for RDX Recrystallization: Influence on Particle Size and Internal Defects. <i>Crystal Growth and Design</i> , 2020, 20, 130-138.	3.0	14
12	Temperature Cycling Induced Deracemization of NaClO <sub>3</sub> under the Influence of Na <sub>2</sub> S <sub>2</sub> O <sub>6</sub> . <i>Crystal Growth and Design</i> , 2020, 20, 414-421.	3.0	12
13	Antisolvent Addition: An Effective Method of Controlled Fluid Inclusion Formation in RDX Crystals. <i>Crystal Growth and Design</i> , 2020, 20, 7120-7128.	3.0	7
14	Twenty-Five Yearsâ€™ History, Mechanism, and Generality of Preferential Enrichment as a Complexity Phenomenon. , 2020, , 405-432.		0
15	Temperature cycle induced deracemization. <i>Mendeleev Communications</i> , 2020, 30, 395-405.	1.6	17
16	Spontaneous and Controlled Macroscopic Chiral Symmetry Breaking by Means of Crystallization. <i>Symmetry</i> , 2020, 12, 1796.	2.2	9
17	Kryptoracemic compound hunting and frequency in the Cambridge Structural Database. <i>CrystEngComm</i> , 2020, 22, 7407-7419.	2.6	16
18	Resolution by Preferential Crystallization of Proxiphylline by Using Its Salicylic Acid Monohydrate Coâ€Crystal. <i>Chemical Engineering and Technology</i> , 2020, 43, 1093-1098.	1.5	17

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19	Evidence of Conglomerate with Partial Solid Solutions in Ethylammonium Chlocyphos. <i>Crystal Growth and Design</i> , 2020, 20, 2562-2569.	3.0	7
20	Discovery of New Proxiphylline-Based Chiral Cocrystals: Solid State Landscape and Dehydration Mechanism. <i>Crystal Growth and Design</i> , 2020, 20, 3842-3850.	3.0	16
21	Family of Conglomerate-Forming Systems Composed of Chlocyphos and Alkyl-amine. Assessment of Their Resolution Performances by Using Various Modes of Preferential Crystallization. <i>Crystal Growth and Design</i> , 2019, 19, 5173-5183.	3.0	9
22	Deracemization in a Complex Quaternary System with a Second-Order Asymmetric Transformation by Using Phase Diagram Studies. <i>Chemistry - A European Journal</i> , 2019, 25, 13890-13898.	3.3	8
23	Resolution of Baclofenium Hydrogenomaleate By Using Preferential Crystallization. A First Case of Complete Solid Solution at High Temperature and a Large Miscibility Gap in the Solid State. <i>Crystal Growth and Design</i> , 2019, 19, 4793-4801.	3.0	23
24	Deracemization in a Complex Quaternary System with a Second-Order Asymmetric Transformation by Using Phase Diagram Studies. <i>Chemistry - A European Journal</i> , 2019, 25, 13837-13837.	3.3	2
25	A Novel Mechanism of Preferential Enrichment Phenomenon Observed for the Cocrystal of (RS) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Journal, 2019, 25, 16405-16413.	3.3	7
26	Disappearing Conglomerates, Assessment of the Threat. <i>Crystal Growth and Design</i> , 2019, 19, 7396-7401.	3.0	6
27	Enabling Direct Preferential Crystallization in a Stable Racemic Compound System. <i>Molecular Pharmaceutics</i> , 2019, 16, 4670-4676.	4.6	17
28	Resolution of an Atropisomeric Naphthamide by Second-Order Asymmetric Transformation: A Highly Productive Technique. <i>Organic Process Research and Development</i> , 2019, 23, 1197-1203.	2.7	23
29	Synthesis and Characterization of Sodium Dithionate and its Dihydrate. <i>Chemical Engineering and Technology</i> , 2019, 42, 1446-1451.	1.5	3
30	Limitations of Preferential Enrichment: A Case Study on Tryptophan Ethyl Ester Hydrochloride. <i>Chemical Engineering and Technology</i> , 2019, 42, 1500-1504.	1.5	5
31	Solvate Formation of Bis(demethoxy)curcumin: Crystal Structure Analyses and Stability Investigations. <i>Crystal Growth and Design</i> , 2019, 19, 854-867.	3.0	18
32	Molecular mobility of amorphous N-acetyl-L-methylbenzylamine and Debye relaxation evidenced by dielectric relaxation spectroscopy and molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 702-717.	2.8	23
33	Limitations during the Resolution of (±)Epinephrine by Using Tartaric Acid. <i>Chemical Engineering and Technology</i> , 2018, 41, 1086-1092.	1.5	2
34	Impact of chirality on the Glass Forming Ability and the crystallization from the amorphous state of 5-ethyl-5-methylhydantoin, a chiral poor glass former. <i>International Journal of Pharmaceutics</i> , 2018, 540, 11-21.	5.2	8
35	Chiral Symmetry Breaking and Deracemization of Sodium Chlorate in Turbulent Flow. <i>Crystal Growth and Design</i> , 2018, 18, 297-306.	3.0	17
36	Investigation of Drug-Excipient Interactions in Bicotymol Amorphous Solid Dispersions. <i>Molecular Pharmaceutics</i> , 2018, 15, 1112-1125.	4.6	13

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37	Vitrification of two active pharmaceutical ingredients by fast scanning calorimetry: From structural relaxation to nucleation phenomena. <i>International Journal of Pharmaceutics</i> , 2018, 536, 426-433.	5.2	11
38	Enhancement of the Physical and Chemical Stability of Amorphous Drug-Polymer Mixtures via Cryogenic Comilling. <i>Macromolecules</i> , 2018, 51, 9382-9392.	4.8	15
39	Practical Role of Racemization Rates in Deracemization Kinetics and Process Productivities. <i>Crystal Growth and Design</i> , 2018, 18, 6417-6420.	3.0	25
40	Unique Superparamagnetic-Like Behavior Observed in Non- $\pi$ -Conjugated delocalized Nitroxide Diradical Compounds Showing Discotic Liquid Crystalline Phase. <i>Chemistry - A European Journal</i> , 2018, 24, 17293-17302.	3.3	12
41	Chirality impact on physical ageing: An original case of a small organic molecule. <i>Materials Letters</i> , 2018, 228, 141-144.	2.6	6
42	A Possible Infinite Number of Components in a Single Crystalline Phase: On the Isomorphism of Brivaracetam-Guest Molecules. <i>Crystal Growth and Design</i> , 2018, 18, 4807-4810.	3.0	3
43	Polymorphic Phase Transition in $\alpha$ -Hydroxyacetophenone: Equilibrium Temperature, Kinetic Barrier, and the Relative Stability of $Z = 1$ and $Z = 2$ Forms. <i>Crystal Growth and Design</i> , 2017, 17, 1918-1932.	3.0	37
44	New Intermediate Polymorph of 1-Fluoro-adamantane and Its Second-Order-like Transition toward the Low Temperature Phase. <i>Crystal Growth and Design</i> , 2017, 17, 3395-3401.	3.0	16
45	Insights on the Physical State Reached by an Active Pharmaceutical Ingredient upon High-Energy Milling. <i>Journal of Physical Chemistry B</i> , 2017, 121, 5142-5150.	2.6	12
46	Binary phase diagrams between phenanthrene and two of its impurities: 9,10-dihydroanthracene and carbazole. <i>European Physical Journal: Special Topics</i> , 2017, 226, 869-880.	2.6	6
47	Crystallization from the Amorphous State of a Pharmaceutical Compound: Impact of Chirality and Chemical Purity. <i>Crystal Growth and Design</i> , 2017, 17, 337-346.	3.0	10
48	Use of Programmed Damped Temperature Cycles for the Deracemization of a Racemic Suspension of a Conglomerate Forming System. <i>Organic Process Research and Development</i> , 2017, 21, 623-630.	2.7	40
49	Optimization of experimental conditions for the monitoring of nucleation and growth of racemic Diprophylline from the supercooled melt. <i>Journal of Crystal Growth</i> , 2017, 472, 11-17.	1.5	5
50	In Situ Observation of Polymorphic Transition during Crystallization of Organic Compounds Showing Preferential Enrichment By Means Of Temperature-Controlled Video-Microscopy and Time-Resolved X-ray Powder Diffraction. <i>Crystal Growth and Design</i> , 2017, 17, 671-676.	3.0	11
51	Phase Diagrams for Process Design. <i>NATO Science for Peace and Security Series A: Chemistry and Biology</i> , 2017, , 215-233.	0.5	2
52	Molecular Relaxations in Supercooled Liquid and Glassy States of Amorphous Quinidine: Dielectric Spectroscopy and Density Functional Theory Approaches. <i>Journal of Physical Chemistry B</i> , 2016, 120, 7579-7592.	2.6	18
53	Pre-nucleation Self-Assembly and Chiral Discrimination Mechanisms during Solution Crystallisation of Racemic Diprophylline. <i>Chemistry - A European Journal</i> , 2016, 22, 16103-16112.	3.3	11
54	A Novel Design Approach To Scale Up the Temperature Cycle Enhanced Deracemization Process: Coupled Mixed-Suspension Vessels. <i>Crystal Growth and Design</i> , 2016, 16, 6461-6467.	3.0	40

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55	A Kinetic/Thermodynamic Origin of Regular Chiral Fluctuation or Symmetry Breaking Unique to Preferential Enrichment. <i>Chemistry - A European Journal</i> , 2016, 22, 11660-11666.	3.3	16
56	Impact of sodium chloride on the expansion of a liquid-liquid miscibility gap in an API/water system. Case study of Brivaracetam. <i>International Journal of Pharmaceutics</i> , 2016, 515, 702-707.	5.2	0
57	Precise Urea/Water Eutectic Composition by Temperature-Resolved Second Harmonic Generation. <i>Chemical Engineering and Technology</i> , 2016, 39, 1326-1332.	1.5	11
58	Phenanthrene Purification: Comparison of Zone Melting and Co-Crystallization. <i>Chemical Engineering and Technology</i> , 2016, 39, 1317-1325.	1.5	8
59	Access to Several Polymorphic Forms of ( $\hat{A}$ $\pm$ )-Modafinil by Using Various Solvation-Desolvation Processes. <i>Crystal Growth and Design</i> , 2016, 16, 396-405.	3.0	14
60	Transformation of an active pharmaceutical ingredient upon high-energy milling: A process-induced disorder in Biclodymol. <i>International Journal of Pharmaceutics</i> , 2016, 499, 67-73.	5.2	24
61	Structural Aspects of Solid Solutions of Enantiomers. <i>Current Pharmaceutical Design</i> , 2016, 22, 4929-4941.	1.9	30
62	Growth Rate Dispersion at the Single-Crystal Level. <i>Chemical Engineering and Technology</i> , 2015, 38, 1011-1016.	1.5	11
63	Relevance of the Second Harmonic Generation to Characterize Crystalline Samples. <i>Chemical Engineering and Technology</i> , 2015, 38, 971-983.	1.5	27
64	Crystallization kinetics and molecular mobility of an amorphous active pharmaceutical ingredient: A case study with Biclodymol. <i>International Journal of Pharmaceutics</i> , 2015, 490, 248-257.	5.2	27
65	Formation of new polymorphs without any nucleation step. Desolvation of the rimonabant monohydrate: directional crystallisation concomitant to smooth dehydration. <i>Faraday Discussions</i> , 2015, 179, 475-488.	3.2	26
66	Attrition Induced Deracemisation of 2-Fluorophenylglycine. <i>Organic Process Research and Development</i> , 2015, 19, 302-308.	2.7	31
67	Enhanced Second Harmonic Generation from an Organic Self-Assembled Eutectic Binary Mixture: A Case Study with 3-Nitrobenzoic and 3,5-Dinitrobenzoic Acids. <i>Crystal Growth and Design</i> , 2015, 15, 946-960.	3.0	18
68	Solubility of chiral species as function of the enantiomeric excess. <i>Journal of Pharmacy and Pharmacology</i> , 2015, 67, 869-878.	2.4	23
69	Crystallization of Terutroban Sodium Salt Hydrate from the Deliquescent State. <i>Chemical Engineering and Technology</i> , 2015, 38, 999-1005.	1.5	4
70	Chiral Discrimination in the Solid State: Applications to Resolution and Deracemization. , 2015, , 393-420.		22
71	Ultrasound-Enhanced Deracemization: Toward the Existence of Agonist Effects in the Interpretation of Spontaneous Symmetry Breaking. <i>Crystal Growth and Design</i> , 2015, 15, 2151-2155.	3.0	51
72	Mechanisms of Reversible Phase Transitions in Molecular Crystals: Case of Ciclopirox. <i>Chemistry of Materials</i> , 2015, 27, 6360-6373.	6.7	29

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73	Crystallization of Chiral Molecules. , 2015, , 951-1002.		20
74	Crystallization of molecular systems from solution: phase diagrams, supersaturation and other basic concepts. Chemical Society Reviews, 2014, 43, 2286-2300.	38.1	114
75	Racemic compound versus conglomerate: concerning the crystal chemistry of the triazolylketone, 1-(4-chlorophenyl)-4,4-dimethyl-2-(1H-1,2,4-triazol-1-yl)pentan-3-one. CrystEngComm, 2014, 16, 4377-4381.	2.6	9
76	Crystal Growth, Structure, and Polymorphic Behavior of an Ionic Liquid: Phthalate Derivative of <i>N</i> -Butyl, <i>N</i> -methylimidazolium Hexafluorophosphate. Chemistry of Materials, 2014, 26, 4151-4162.	6.7	10
77	Mathematical Modeling of Chiral Symmetry Breaking due to Differences in Crystal Growth Kinetics. Chemical Engineering and Technology, 2014, 37, 1329-1339.	1.5	34
78	Monotropic Transition Mechanism of <i>m</i> -Hydroxybenzoic Acid Investigated by Temperature-Resolved Second Harmonic Generation. Crystal Growth and Design, 2013, 13, 3697-3704.	3.0	28
79	Impact of Molecular Flexibility on Double Polymorphism, Solid Solutions and Chiral Discrimination during Crystallization of Diprophylline Enantiomers. Molecular Pharmaceutics, 2013, 10, 3850-3861.	4.6	55
80	Special Chapter Advanced Thermal Science in France. Journal of Thermal Analysis and Calorimetry, 2013, 112, 211-213.	3.6	0
81	A Hybrid Mechanism in Chiral Discrimination Induced by Crystallization of Supramolecular Compounds. Journal of Physical Chemistry B, 2012, 116, 6027-6040.	2.6	11
82	Incidence of crystal growth conditions on the formation of macroscopic liquid inclusions in ciclopirox crystals. Journal of Crystal Growth, 2012, 342, 72-79.	1.5	20
83	Crystal structure of a hybrid salt "cocrystal and its resolution by preferential crystallization: (( $\hat{\pm}$ )-trans-N,N <sup>2</sup> -dibenzyl-diaminocyclohexane)(2,3-dichlorophenylacetic acid) <sub>4</sub> . CrystEngComm, 2012, 14, 103-111.	2.6	28
84	Spotting a Conglomerate Is Just Halfway to Achieving a Preparative Resolution by Preferential Crystallization. Organic Process Research and Development, 2012, 16, 286-293.	2.7	23
85	Chapter 13. Limits of the Co-crystal Concept and Beyond. RSC Drug Discovery Series, 2011, , 300-317.	0.3	3
86	Pitfalls and rewards of preferential crystallization. CrystEngComm, 2010, 12, 1983.	2.6	106
87	Preparative resolution of ( $\hat{\pm}$ )-trans-1,2-diaminocyclohexane by means of preferential crystallization of its citrate monohydrate. Tetrahedron: Asymmetry, 2010, 21, 2212-2217.	1.8	9
88	Attrition-enhanced preferential crystallization combined with racemization leading to redissolution of the antipode nuclei. Tetrahedron: Asymmetry, 2009, 20, 2769-2771.	1.8	37
89	Spotting Conglomerates by Second Harmonic Generation. Crystal Growth and Design, 2009, 9, 2713-2718.	3.0	65
90	Structural and Physicochemical Characterization of a Solid Solution Produced by Antisolvent Crystallization of a New Phosphoantigen. Crystal Growth and Design, 2009, 9, 3910-3917.	3.0	8

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91	Mechanism of Hydration and Dehydration of Ciclopirox Ethanolamine (1:1). <i>Crystal Growth and Design</i> , 2009, 9, 3918-3927.	3.0	15
92	Chiral Discrimination at the Solid State of Methyl 2-(Diphenylmethylsulfinyl)acetate. <i>Crystal Growth and Design</i> , 2007, 7, 1599-1607.	3.0	33
93	Preferential crystallization in an unusual case of conglomerate with partial solid solutions. <i>Tetrahedron: Asymmetry</i> , 2007, 18, 821-831.	1.8	51
94	Synthesis and X-ray structural studies of the dextro-rotatory enantiomer of methyl $\hat{\pm}$ -5(4,5,6,7-tetrahydro(3,2-c)thieno pyridyl) (2-chlorophenyl)-acetate isopropylsulfate. <i>Journal of Molecular Structure</i> , 2007, 827, 108-113.	3.6	1
95	Preferential Crystallization. <i>Topics in Current Chemistry</i> , 2006, 269, 1-51.	4.0	99
96	The $\hat{\pm}$ structural purity <sup>TM</sup> of molecular solids <sup>SM</sup> An elusive concept?. <i>Chemical Engineering and Processing: Process Intensification</i> , 2006, 45, 857-862.	3.6	35
97	Diastereomeric resolution rationalized by phase diagrams under the actual conditions of the experimental process. <i>Tetrahedron: Asymmetry</i> , 2004, 15, 2455-2465.	1.8	53
98	Pleconaril Polymorphs: $\hat{\pm}$ Crystal Structures of Form I and Form III, Evidence of the Enantiotropy, and Assessment of the Structural Purity. <i>Crystal Growth and Design</i> , 2004, 4, 1237-1244.	3.0	17
99	Successful Application of the Derived Crystal Packing (DCP) Model in Resolving the Crystal Structure of a Metastable Polymorph of ( $\hat{\pm}$ ) Modafinil $\hat{\pm}$ . <i>Crystal Growth and Design</i> , 2004, 4, 1143-1151.	3.0	21
100	A Priori Assessment of the Maximum Possible Entrainment Effect Attainable during Preferential Crystallization. The Case of the Simultaneous Resolution of ( $\hat{\pm}$ )-Ephedrine and ( $\hat{\pm}$ )-Mandelic Acid. <i>Bulletin of the Chemical Society of Japan</i> , 2004, 77, 79-86.	3.2	25
101	Resolution of Pasteur salts by auto-seeded preferential crystallization. <i>Mendeleev Communications</i> , 2003, 13, 95-96.	1.6	10
102	Oscillating Crystallization in Solution between (+)- and ( $\hat{\pm}$ )-5-Ethyl-5-methylhydantoin under the Influence of Stirring. <i>Journal of Physical Chemistry B</i> , 2002, 106, 646-652.	2.6	53
103	Simple model designed to generate new crystal structures derived from a mother phase; application to molecular compounds. <i>Acta Crystallographica Section B: Structural Science</i> , 2002, 58, 662-672.	1.8	28
104	Investigations on the reciprocal ternary system ( $\hat{\pm}$ )-2-phenylpropionic acid $\hat{\pm}$ ( $\hat{\pm}$ )-1 $\hat{\pm}$ -methylbenzylamine. Impact of an unstable racemic compound on the simultaneous resolution of chiral acids and bases by preferential crystallisation Electronic supplementary information (ESI) available: examination of the crystal growth paths for racemic solutions and the case of non-racemic solutions $\hat{\pm}$ application to the PC. See <a href="http://www.rsc.org/suppdata/p2/b1/b100706h/Glossary: A Acidic ion. A Configuration of a ladder; the chir. Perkin Transactions II RSC, 2001, 2022-2036">http://www.rsc.org/suppdata/p2/b1/b100706h/Glossary: A Acidic ion. A Configuration of a ladder; the chir. Perkin Transactions II RSC, 2001, 2022-2036</a> .	1.1	4
105	Preferential crystallisation and comparative crystal growth study between pure enantiomer and racemic mixture of a chiral molecule: 5-ethyl-5-methylhydantoin. <i>Chemical Engineering Science</i> , 2001, 56, 2281-2294.	3.8	51
106	How far can an unstable racemic compound affect the performances of preferential crystallization? Example with (R) and (S $\hat{\pm}$ )-1 $\hat{\pm}$ -methylbenzylamine chloroacetate $\hat{\pm}$ . <i>Journal of the Chemical Society Perkin Transactions II</i> , 1998, , 2211-2220.	0.9	21
107	Mechanism of Several Solid $\hat{\pm}$ Solid Transformations between Dihydrated and Anhydrous Copper(II) 8-Hydroxyquinolinates. Proposition for a Unified Model for the Dehydration of Molecular Crystals. <i>Chemistry of Materials</i> , 1996, 8, 2247-2258.	6.7	138
108	Recognition of enantiomers through morphology of single crystals; application to some 5-alkyl-5-aryl-hydantoin derivatives. <i>Journal of Crystal Growth</i> , 1993, 130, 173-180.	1.5	14

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109	Crystal Structure of (I)Trimebutine Trihydrogenodimaleate.. Analytical Sciences, 1993, 9, 557-559.	1.6	2