

# Applications of Artificial Intelligence and Machine Lear

Chemical Reviews

122, 13006-13042

DOI: 10.1021/acs.chemrev.2c00141

Citation Report

#	ARTICLE	IF	CITATIONS
1	Revealing the role of polymer in the robust preparation of the 2,4-dichlorophenoxyacetic acid metastable crystal form by AI-based image analysis. <i>Powder Technology</i> , 2023, 413, 118077.	4.5	10
2	Iterative model-based optimal experimental design for mixture-process variable models to predict solubility. <i>Chemical Engineering Research and Design</i> , 2023, 189, 768-780.	6.4	3
3	Synthetic Strategies toward Higher Cocrystals of Some Resorcinols. <i>Crystal Growth and Design</i> , 2022, 22, 7578-7589.	3.5	22
4	A synthetic machine learning framework for complex crystallization processes: The case study of the second-order asymmetric transformation of enantiomers. <i>Chemical Engineering Journal</i> , 2023, 465, 142800.	11.9	12
5	Optimized identification of cheese products based on Raman spectroscopy and an extreme learning machine. <i>New Journal of Chemistry</i> , 2023, 47, 6889-6894.	2.5	17
6	Building confidence in deep Learning-based image analytics for characterization of pharmaceutical samples. <i>Chemical Engineering Science</i> , 2023, 278, 118904.	4.0	6
7	Modeling and Predictive Control of Cooling Crystallization of Potassium Sulfate by Dynamic Image Analysis: Exploring Phenomenological and Machine Learning Approaches. <i>Industrial &amp; Engineering Chemistry Research</i> , 2023, 62, 9515-9532.	4.0	15
8	Integrating Machine Learning and Molecular Simulation for Material Design and Discovery. , 2023, 8, 325-340.		6
9	Crystallization: A Tool for Asymmetric Synthesis and Isolation. , 2024, , 81-134.		1
10	Enabling technologies for process intensification in pharmaceutical research and manufacturing. <i>Current Opinion in Chemical Engineering</i> , 2023, 41, 100920.	7.2	13
11	Benefits of Application of Process Optimization in Pharmaceutical Manufacturing: A Panoramic View. , 2023, , 291-304.		1
12	A crystallization case study toward optimization of expensive to evaluate mathematical models using Bayesian approach. <i>Materials and Manufacturing Processes</i> , 2023, 38, 2127-2134.	4.8	42
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14	Discovery of structure–property relations for molecules via hypothesis-driven active learning over the chemical space. , 2023, 1, .		6
15	Developing diagnostic tools for canine periodontitis: combining molecular techniques and machine learning models. <i>BMC Veterinary Research</i> , 2023, 19, .	2.3	5
16	Opportunities for Machine Learning and Artificial Intelligence to Advance Synthetic Drug Substance Process Development. <i>Organic Process Research and Development</i> , 2023, 27, 1868-1879.	3.9	22
17	MatGPT: A Vane of Materials Informatics from Past, Present, to Future. <i>Advanced Materials</i> , 2024, 36, .	24.4	51
18	Improved modeling of crystallization processes by Universal Differential Equations. <i>Chemical Engineering Research and Design</i> , 2023, 200, 538-549.	6.4	16

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19	Optimizing environmental sustainability in pharmaceutical 3D printing through machine learning. International Journal of Pharmaceutics, 2023, 648, 123561.	4.9	17
20	Transforming organic chemistry research paradigms: Moving from manual efforts to the intersection of automation and artificial intelligence. National Science Open, 2023, , 20230037.	3.1	1
21	A step forward in food science, technology and industry using artificial intelligence. Trends in Food Science and Technology, 2024, 143, 104286.	15.7	62
22	Developing a model-driven workflow for the digital design of small-scale batch cooling crystallisation with the antiviral lamivudine. CrystEngComm, 2024, 26, 822-834.	2.5	7
23	A critical review of machine learning algorithms in maritime, offshore, and oil & gas corrosion research: A comprehensive analysis of ANN and RF models. Ocean Engineering, 2024, 295, 116796.	4.9	47
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27	Inhibition of Crystal Nucleation and Growth: A Review. Crystal Growth and Design, 2024, 24, 2645-2665.	3.5	59
28	Rapid prototyping of a modular optical flow cell for image-based droplet size measurements in emulsification processes. Journal of Flow Chemistry, 2024, 14, 515-528.	1.8	6
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33	Enhanced sustainability with crystallization in continuous flow. Current Opinion in Green and Sustainable Chemistry, 2024, 48, 100937.	6.2	2
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36	Current trends and advancements in crystallization and single-crystal structural analysis of small molecules. Coordination Chemistry Reviews, 2024, 517, 216035.	23.4	26
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41	An Enhanced Deep Learning-Based Pharmaceutical Crystal Detection with Regional Filtering. <i>Crystals</i> , 2024, 14, 709.	2.3	1
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44	Effect of the Functional Group Position in Coformers on Ternary Cocrystals: A Case of Sulfamoylbenzoic Acids. <i>Crystal Growth and Design</i> , 2024, 24, 7455-7465.	3.5	1
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54	Digital Design of Cooling Crystallization Processes Using a Machine Learning-Based Strategy. <i>Industrial &amp; Engineering Chemistry Research</i> , 2024, 63, 20236-20251.	4.0	7
55	Information Network Security Situation Awareness Based on Artificial Intelligence and Machine Learning Algorithms. , 2024, , 1-6.		0

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56	Crystal Structure Prediction Using Generative Adversarial Network with Data-Driven Latent Space Fusion Strategy. <i>Journal of Chemical Theory and Computation</i> , 2024, 20, 9627-9641.	5.5	9
57	Neural Network Inverse Model Controllers for Paracetamol Unseeded Batch Cooling Crystallization. <i>Industrial &amp; Engineering Chemistry Research</i> , 2024, 63, 19613-19627.	4.0	8
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