

# Technological Innovations in Photochemistry for Organic Synthesis: High-Throughput Experimentation, Scale-up, and Photocatalysis

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Photocatalytic C-H Azolation of Arenes Using Heterogeneous Carbon Nitride in Batch and Flow. <i>ChemSusChem</i> , 2021, 14, 5265-5270.	3.6	14
2	Forgotten and forbidden chemical reactions revitalised through continuous flow technology. <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 7737-7753.	1.5	32
3	Development of an Off-Grid Solar-Powered Autonomous Chemical Mini-Plant for Producing Fine Chemicals. <i>ChemSusChem</i> , 2021, 14, 5417-5423.	3.6	13
4	The development of luminescent solar concentrator-based photomicroreactors: a cheap reactor enabling efficient solar-powered photochemistry. <i>Photochemical and Photobiological Sciences</i> , 2022, 21, 705-717.	1.6	16
5	Continuous Flow Synthesis of Anticancer Drugs. <i>Molecules</i> , 2021, 26, 6992.	1.7	5
6	Dynamically triggering photoreactions for high performance and efficiency. <i>Current Opinion in Chemical Engineering</i> , 2022, 36, 100789.	3.8	3
7	Continuous-Flow Hofmann Rearrangement Using Trichloroisocyanuric Acid for the Preparation of 2-Benzoxazolinone. <i>Organic Process Research and Development</i> , 2022, 26, 422-430.	1.3	12
8	Simple Fabrication of a Continuous-Flow Photocatalytic Reactor Using Dopamine-Assisted Immobilization onto a Fluoropolymer Tubing. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 1322-1331.	1.8	5
9	Modeling and Simulation of Reaction Environment in Photoredox Catalysis: A Critical Review. <i>Frontiers in Chemical Engineering</i> , 2022, 3, .	1.3	1
10	Improved efficiency of photo-induced synthetic reactions enabled by advanced photo flow technologies. <i>Photochemical and Photobiological Sciences</i> , 2022, 21, 761-775.	1.6	4
11	Development of a high intensity parallel photoreactor for high throughput screening. <i>Reaction Chemistry and Engineering</i> , 2022, 7, 354-360.	1.9	18
12	Photobiocatalysis in Continuous Flow. <i>Frontiers in Catalysis</i> , 2022, 1, .	1.8	18
13	Understanding Ir(III) Photocatalyst Structure-Activity Relationships: A Highly Parallelized Study of Light-Driven Metal Reduction Processes. <i>Journal of the American Chemical Society</i> , 2022, 144, 1431-1444.	6.6	18
14	Photochemical C-Sp <sup>2</sup> -H bond thiocyanation and selenocyanation of activated arenes, batch and continuous-flow approaches. <i>Photochemical and Photobiological Sciences</i> , 2022, 21, 849-861.	1.6	8
15	A scalable light-diffusing photochemical reactor for continuous processing of photoredox reactions. <i>Chemical Engineering Journal</i> , 2022, 435, 134889.	6.6	6
16	Commercial-Scale Visible Light Trifluoromethylation of 2-Chlorothiophenol Using CF <sub>3</sub> I Gas. <i>Organic Process Research and Development</i> , 2022, 26, 404-412.	1.3	21
17	Multiple wavelength (365-475 nm) complete actinometric characterization of Corning® Lab Photo Reactor using azobenzene as a highly soluble, cheap and robust chemical actinometer. <i>Photochemical and Photobiological Sciences</i> , 2022, 21, 421-432.	1.6	4
18	Batch or flow chemistry? - a current industrial opinion on process selection. <i>Current Opinion in Chemical Engineering</i> , 2022, 36, 100798.	3.8	21

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20	Asymmetric $\hat{I}^2$ -arylation of cyclopropanols enabled by photoredox and nickel dual catalysis. <i>Chemical Science</i> , 2022, 13, 3020-3026.	3.7	4
21	Continuous stirred-tank reactor cascade platform for self-optimization of reactions involving solids. <i>Reaction Chemistry and Engineering</i> , 2022, 7, 1315-1327.	1.9	22
22	Continuous-flow synthesis of alkyl zinc sulfinates for the direct photofunctionalization of heterocycles. <i>Chemical Communications</i> , 2022, 58, 4611-4614.	2.2	4
23	Synthesis efficiency of silver nanoparticles by light-emitting diode and microwave irradiation using starch as a reducing agent. <i>Nanotechnology for Environmental Engineering</i> , 2022, 7, 297-306.	2.0	0
24	Flow synthesis of oxadiazoles coupled with sequential in-line extraction and chromatography. <i>Beilstein Journal of Organic Chemistry</i> , 2022, 18, 232-239.	1.3	1
25	Exploring metallic and plastic 3D printed photochemical reactors for customizing chemical synthesis. <i>Scientific Reports</i> , 2022, 12, 3780.	1.6	5
26	Synthesis of Doped/Hybrid Carbon Dots and Their Biomedical Application. <i>Nanomaterials</i> , 2022, 12, 898.	1.9	22
27	Three-Dimensional Large-Scale Fused Silica Microfluidic Chips Enabled by Hybrid Laser Microfabrication for Continuous-Flow UV Photochemical Synthesis. <i>Micromachines</i> , 2022, 13, 543.	1.4	8
28	Automated synthesis and characterization techniques for solar fuel production. <i>Nature Reviews Materials</i> , 2022, 7, 251-253.	23.3	11
29	Unveiling the Synthetic Potential of Substituted Phenols as Fully Recyclable Organophotoredox Catalysts for the Iodosulfonylation of Olefins. <i>ACS Catalysis</i> , 2022, 12, 4290-4295.	5.5	20
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31	Flow Chemistry: A Sustainable Voyage Through the Chemical Universe en Route to Smart Manufacturing. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2022, 13, 45-72.	3.3	16
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33	Photochemical Deracemization of a Medicinally- $\hat{C}$ Relevant Benzopyran using an Oscillatory Flow Reactor. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	16
34	Orange-Light-Induced Photochemistry Gated by pH and Confined Environments. <i>Journal of the American Chemical Society</i> , 2022, 144, 6343-6348.	6.6	19
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36	Advances in C1-deuterated aldehyde synthesis. <i>Coordination Chemistry Reviews</i> , 2022, 463, 214525.	9.5	13

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37	Evaluation of self-sustaining cyanobacterial biofilms for technical applications. <i>Biofilm</i> , 2022, 4, 100073.	1.5	11
38	Recent Advances in C(sp <sup>3</sup> )–C(sp <sup>3</sup> ) and C(sp <sup>3</sup> )–C(sp <sup>2</sup> ) Bond Formation through Cathodic Reactions: Reductive and Convergent Paired Electrolyses. <i>ACS Organic &amp; Inorganic Au</i> , 2022, 2, 126-147.	1.9	34
39	Accelerated and Scalable C(sp <sup>3</sup> )–H Amination via Decatungstate Photocatalysis Using a Flow Photoreactor Equipped with High-Intensity LEDs. <i>ACS Central Science</i> , 2022, 8, 51-56.	5.3	35
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41	The Photochemical Activity of a Halogen-Bonded Complex Enables the Microfluidic Light-Driven Alkylation of Phenols. <i>Organic Letters</i> , 2022, 24, 2961-2966.	2.4	22
42	Continuous flow process for preparing budesonide. <i>Journal of Flow Chemistry</i> , 2022, , 1-10.	1.2	0
43	Data-Driven Materials Innovation and Applications. <i>Advanced Materials</i> , 2022, 34, e2104113.	11.1	51
44	Continuous Room-Temperature Hydrogen Release from Liquid Organic Carriers in a Photocatalytic Packed-Bed Flow Reactor. <i>ChemSusChem</i> , 2022, , .	3.6	3
45	Mediated Electron Transfer in Electrosynthesis: Concepts, Applications, and Recent Influences from Photoredox Catalysis. <i>RSC Green Chemistry</i> , 2022, , 119-153.	0.0	1
46	State of knowledge in photoredox-catalysed direct difluoromethylation. <i>Organic Chemistry Frontiers</i> , 2022, 9, 3598-3623.	2.3	39
47	Selective Photochemical Continuous Flow Benzylic Monochlorination. <i>Organic Process Research and Development</i> , 2022, 26, 1496-1505.	1.3	1
48	Î±-C–H Photoalkylation of a Glucose Derivative in Continuous Flow. <i>Synthesis</i> , 2022, 54, 4683-4689.	1.2	4
49	Synthetic Applications of Photocatalyzed Halogen-Radical Mediated Hydrogen Atom Transfer for C–H Bond Functionalization. <i>European Journal of Organic Chemistry</i> , 2022, 2022, .	1.2	36
50	Enhanced flow electrochemistry for cyclohexane Conversion: From simulation to application. <i>Journal of Catalysis</i> , 2022, 410, 84-92.	3.1	8
51	A synergistic study on the synthesis of juglone via photooxidation in a UV-Vis LED based photomicroreactor. <i>Chemical Engineering Journal</i> , 2022, 445, 136663.	6.6	8
52	Trace amount of single-atom palladium-catalyzed selective hydrosilylation of allenes. <i>Nano Research</i> , 2022, 15, 7091-7098.	5.8	9
53	Dehydroalanine modification sees the light: a photochemical conjugate addition strategy. <i>Trends in Chemistry</i> , 2022, 4, 643-657.	4.4	21
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56	Modular allylation of C(sp <sup>3</sup> )-H bonds by combining decatungstate photocatalysis and HWE olefination in flow. <i>Chemical Science</i> , 2022, 13, 7325-7331.	3.7	20
57	Solution-processable microporous polymer platform for heterogenization of diverse photoredox catalysts. <i>Nature Communications</i> , 2022, 13, .	5.8	11
58	Photoelectrochemical Oxidation of Glycerol to Dihydroxyacetone Over an Acid-Resistant Ta:BiVO <sub>4</sub> Photoanode. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7586-7594.	3.2	24
59	Recent advances in visible-light-mediated functionalization of olefins and alkynes using copper catalysts. <i>Chemical Communications</i> , 2022, 58, 7850-7873.	2.2	14
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65	Comparative Evaluation of Light-Driven Catalysis: A Framework for Standardized Reporting of Data**. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	32
66	Immobilized Eosin Y for the Photocatalytic Oxidation of Tetrahydroisoquinolines in Flow. <i>ChemCatChem</i> , 2022, 14, .	1.8	6
67	Direct C-H Trifluoromethylation of (Hetero)Arenes in Water Enabled by Organic Photoredox-Active Amphiphilic Nanoparticles. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	10
68	Ionic liquid gel microspheres as an emerging platform for constructing liquid compartment microreactors. <i>Green Chemistry</i> , 2022, 24, 5952-5964.	4.6	2
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70	Recent advances in chemical fixation of CO <sub>2</sub> based on flow chemistry. <i>Chinese Chemical Letters</i> , 2023, 34, 107782.	4.8	8
71	Ligand-to-Metal Charge Transfer (LMCT) Photochemistry at 3d-Metal Complexes: An Emerging Tool for Sustainable Organic Synthesis. <i>ChemCatChem</i> , 2022, 14, .	1.8	82
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75	Rapid and Replaceable Luminescent Coating for Silicon-Based Microreactors Enabling Energy-Efficient Solar Photochemistry. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 10712-10717.	3.2	2
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77	Synthesis of Thiomorpholine via a Telescoped Photochemical Thiol-Ene/Cyclization Sequence in Continuous Flow. <i>Organic Process Research and Development</i> , 2022, 26, 2532-2539.	1.3	8
78	Design of a Photocatalytic [2+2] Cycloaddition Reaction Using Redox-Tag Strategy. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	5
79	Visible-Light-Driven $\alpha$ -Hydroxymethylation of Ketones in a Continuous-Flow Microreactor. <i>Synlett</i> , 2023, 34, 86-92.	1.0	2
80	Scaling up multiphase photochemical reactions using translucent monoliths. <i>Chemical Engineering and Processing: Process Intensification</i> , 2022, 181, 109138.	1.8	5
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90	Electrochemical Synthesis of <i>gem</i> -difluoro- and <i>β</i> -fluoro-allyl Boronates and Silanes. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	20

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92	Mechanistic Understanding of Electrocatalytic Vinylcyclopropane Rearrangement. <i>European Journal of Organic Chemistry</i> , 2022, 2022, .	1.2	2
93	Dual role of benzophenone enables a fast and scalable C-4 selective alkylation of pyridines in flow. <i>Chemical Science</i> , 2022, 13, 12527-12532.	3.7	7
94	Photoinduced arylation of chloroarenes in flow: synthesis of unsymmetrical biaryls. <i>Organic and Biomolecular Chemistry</i> , 2022, 20, 8212-8216.	1.5	1
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99	Membrane-based TBADT recovery as a strategy to increase the sustainability of continuous-flow photocatalytic HAT transformations. <i>Nature Communications</i> , 2022, 13, .	5.8	14
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104	<i>N,N</i> -Diisopropylethylamine-Mediated Electrochemical Reduction of Azobenzenes in Dichloromethane. <i>Journal of Organic Chemistry</i> , 0, .	1.7	3
105	Precisely Tailoring Heterometallic Polyoxotitanium Clusters for the Efficient and Selective Photocatalytic Oxidation of Hydrocarbons. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	2
106	Taming Highly Unstable Radical Anions and 1,4-Organodilithiums by Flow Microreactors: Controlled Reductive Dimerization of Styrenes. <i>Jacs Au</i> , 2022, 2, 2514-2521.	3.6	8
107	Precisely Tailoring Heterometallic Polyoxotitanium Clusters for the Efficient and Selective Photocatalytic Oxidation of Hydrocarbons. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	23
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116	Visible Light-Mediated Cyclisation Reaction for the Synthesis of Highly-Substituted Tetrahydroquinolines and Quinolines.. <i>Angewandte Chemie</i> , 0, , .	1.6	0
117	Visible Light-Mediated Cyclisation Reaction for the Synthesis of Highly-Substituted Tetrahydroquinolines and Quinolines. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	7
118	Flow Photo-On-Demand Phosgenation Reactions with Chloroform. <i>Organic Process Research and Development</i> , 2022, 26, 3336-3344.	1.3	7
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130	Photochemical Synthesis of Pyrazolines from Tetrazoles in Flow. <i>SynOpen</i> , 0, , .	0.8	1
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133	Development of an Automated Platform for C(sp <sup>3</sup> )-C(sp <sup>3</sup> ) Bond Formation via XAT Chemistry. <i>ChemCatChem</i> , 2023, 15, .	1.8	4
134	Visible-Light-Driven Hydrophosphorylation of Azobenzenes Enabled by <i>trans</i> -to- <i>cis</i> Photoisomerization. <i>Advanced Synthesis and Catalysis</i> , 2022, 364, 4275-4280.	2.1	6
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141	Mechanisms and Synthetic Strategies in Visible Light-Driven [2+2] Heterocycloadditions. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	22
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143	Modern Photocatalytic Strategies in Natural Product Synthesis. <i>Progress in the Chemistry of Organic Natural Products</i> , 2023, , 1-104.	0.8	0
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