

# Bruno Grignard

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5275132/publications.pdf>

Version: 2024-02-01

63  
papers

2,356  
citations

185998

28  
h-index

223531

46  
g-index

63  
all docs

63  
docs citations

63  
times ranked

2038  
citing authors

#	ARTICLE	IF	CITATIONS
1	Advances in the use of CO <sub>2</sub> as a renewable feedstock for the synthesis of polymers. <i>Chemical Society Reviews</i> , 2019, 48, 4466-4514.	18.7	438
2	Metal-Free Strategies for the Synthesis of Functional and Well-Defined Polyphosphoesters. <i>Macromolecules</i> , 2012, 45, 4476-4486.	2.2	121
3	CO <sub>2</sub> -Sourced $\hat{\imath}$ -Alkylidene Cyclic Carbonates: A Step Forward in the Quest for Functional Regioregular Poly(urethane)s and Poly(carbonate)s. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 10394-10398.	7.2	109
4	Fluorinated Alcohols as Activators for the Solvent-Free Chemical Fixation of Carbon Dioxide into Epoxides. <i>ChemSusChem</i> , 2015, 8, 1845-1849.	3.6	102
5	Electrospinning of a Functional Perfluorinated Block Copolymer as a Powerful Route for Imparting Superhydrophobicity and Corrosion Resistance to Aluminum Substrates. <i>Langmuir</i> , 2011, 27, 335-342.	1.6	90
6	Structure and Properties of a Semifluorinated Diblock Copolymer Modified Epoxy Blend. <i>Macromolecules</i> , 2007, 40, 4068-4074.	2.2	88
7	Catechol Containing Polyhydroxyurethanes as High-Performance Coatings and Adhesives. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 14936-14944.	3.2	65
8	Bio-based poly(hydroxyurethane) glues for metal substrates. <i>Polymer Chemistry</i> , 2018, 9, 2650-2659.	1.9	63
9	Chemo- and Regioselective Additions of Nucleophiles to Cyclic Carbonates for the Preparation of Self-Blowing Non-isocyanate Polyurethane Foams. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17033-17041.	7.2	60
10	Poly(hydroxyurethane) Adhesives and Coatings: State-of-the-Art and Future Directions. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9541-9562.	3.2	60
11	Dispersion Atom Transfer Radical Polymerization of Vinyl Monomers in Supercritical Carbon Dioxide. <i>Macromolecules</i> , 2008, 41, 8575-8583.	2.2	50
12	Organocatalytic Coupling of CO <sub>2</sub> with Oxetane. <i>ChemSusChem</i> , 2017, 10, 1128-1138.	3.6	45
13	Superhydrophobic Aluminum Surfaces by Deposition of Micelles of Fluorinated Block Copolymers. <i>Langmuir</i> , 2010, 26, 2057-2067.	1.6	42
14	Self-foaming polymers: Opportunities for the next generation of personal protective equipment. <i>Materials Science and Engineering Reports</i> , 2021, 145, 100628.	14.8	42
15	Exovinylene Cyclic Carbonates: Multifaceted CO <sub>2</sub> -Based Building Blocks for Modern Chemistry and Polymer Science. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	39
16	Boosting the Catalytic Performance of Organic Salts for the Fast and Selective Synthesis of $\hat{\imath}$ -Alkylidene Cyclic Carbonates from Carbon Dioxide and Propargylic Alcohols. <i>ChemCatChem</i> , 2018, 10, 2584-2592.	1.8	38
17	Atom transfer radical polymerization of MMA with a macromolecular ligand in a fluorinated solvent and in supercritical carbon dioxide. <i>European Polymer Journal</i> , 2008, 44, 861-871.	2.6	36
18	Influence of the Cyclic versus Linear Carbonate Segments in the Properties and Performance of CO <sub>2</sub> -Sourced Polymer Electrolytes for Lithium Batteries. <i>ACS Applied Polymer Materials</i> , 2020, 2, 922-931.	2.0	36

#	ARTICLE	IF	CITATIONS
19	Monocomponent Non-isocyanate Polyurethane Adhesives Based on a Sol-Gel Process. ACS Applied Polymer Materials, 2020, 2, 1839-1847.	2.0	35
20	Gold Nanorods with Phase-Changing Polymer Corona for Remotely Near-Infrared-Triggered Drug Release. Chemistry - an Asian Journal, 2014, 9, 275-288.	1.7	34
21	Tetrabutylammonium Salts: Cheap Catalysts for the Facile and Selective Synthesis of $\alpha$ -Alkylidene Cyclic Carbonates from Carbon Dioxide and Alkynols. ChemCatChem, 2018, 10, 956-960.	1.8	33
22	Divergent Aminolysis Approach for Constructing Recyclable Self-Blown Nonisocyanate Polyurethane Foams. ACS Macro Letters, 2022, 11, 236-242.	2.3	33
23	Organocatalytic Coupling of $\text{CO}_2$ with a Propargylic Alcohol: A Comprehensive Mechanistic Study. ChemSusChem, 2017, 10, 1241-1248.	3.6	32
24	A supercritical fluid technology for liposome production and comparison with the film hydration method. International Journal of Pharmaceutics, 2021, 592, 120093.	2.6	30
25	Controlled synthesis of carboxylic acid end-capped poly(heptadecafluorodecyl acrylate) and copolymers with 2-hydroxyethyl acrylate. Journal of Polymer Science Part A, 2007, 45, 1499-1506.	2.5	29
26	Copper bromide complexed by fluorinated macroligands: towards microspheres by ATRP of vinyl monomers in $\text{scCO}_2$ . Chemical Communications, 2008, , 314-316.	2.2	29
27	$\text{CO}_2$ -Sourced $\alpha$ -Alkylidene Cyclic Carbonates: A Step Forward in the Quest for Functional Regioregular Poly(urethane)s and Poly(carbonate)s. Angewandte Chemie, 2017, 129, 10530-10534.	1.6	29
28	$\text{CO}_2$ -sourced polycarbonates as solid electrolytes for room temperature operating lithium batteries. Journal of Materials Chemistry A, 2019, 7, 9844-9853.	5.2	29
29	A Switchable Domino Process for the Construction of Novel $\text{CO}_2$ -Sourced Sulfur-Containing Building Blocks and Polymers. Angewandte Chemie - International Edition, 2019, 58, 11768-11773.	7.2	26
30	One-pot dispersion ATRP and alkyne-azide Huisgen's 1,3-dipolar cycloaddition in supercritical carbon dioxide: Towards the formation of functional microspheres. Journal of Supercritical Fluids, 2010, 53, 151-155.	1.6	22
31	Dispersion nitroxide mediated polymerization of methyl methacrylate in supercritical carbon dioxide using in situ formed stabilizers. Polymer Chemistry, 2010, 1, 837.	1.9	22
32	Block, random and palm-tree amphiphilic fluorinated copolymers: controlled synthesis, surface activity and use as dispersion polymerization stabilizers. Polymer Chemistry, 2014, 5, 5273-5282.	1.9	22
33	Access to Biorenewable and $\text{CO}_2$ -Based Polycarbonates from Exovinylene Cyclic Carbonates. ACS Sustainable Chemistry and Engineering, 2021, 9, 1714-1728.	3.2	22
34	Correlation between Superhydrophobicity and the Power Spectral Density of Randomly Rough Surfaces. Langmuir, 2010, 26, 17798-17803.	1.6	21
35	A Catalytic Domino Approach toward Oxo-Alkyl Carbonates and Polycarbonates from $\text{CO}_2$ , Propargylic Alcohols, and (Mono- and Di-)Alcohols. ACS Sustainable Chemistry and Engineering, 2020, 8, 9698-9710.	3.2	21
36	$\text{CO}_2$ -Sourced Nonisocyanate Poly(Urethane)s with pH-Sensitive Imine Linkages. Advanced Synthesis and Catalysis, 2019, 361, 355-365.	2.1	20

#	ARTICLE	IF	CITATIONS
37	Advancing the Synthesis of Isocyanate-Free Poly(oxazolidones): Scope and Limitations. <i>Macromolecules</i> , 2020, 53, 6396-6408.	2.2	20
38	Chemo- and Regioselective Additions of Nucleophiles to Cyclic Carbonates for the Preparation of Self-Blowing Nonisocyanate Polyurethane Foams. <i>Angewandte Chemie</i> , 2020, 132, 17181-17189.	1.6	20
39	First example of $\kappa$ -copper(i) catalyzed azide-alkyne cycloaddition in supercritical carbon dioxide: application to the functionalization of aliphatic polyesters. <i>Green Chemistry</i> , 2009, 11, 1525.	4.6	18
40	Merging CO <sub>2</sub> -Based Building Blocks with Cobalt-Mediated Radical Polymerization for the Synthesis of Functional Poly(vinyl alcohol)s. <i>Macromolecules</i> , 2018, 51, 3379-3393.	2.2	18
41	Synergetic Effect of Dopamine and Alkoxysilanes in Sustainable Nonisocyanate Polyurethane Adhesives. <i>Macromolecular Rapid Communications</i> , 2021, 42, e2000538.	2.0	18
42	Synthesis of Biodegradable Poly- $\epsilon$ -caprolactone Microspheres by Dispersion Ring-Opening Polymerization in Supercritical Carbon Dioxide. <i>Biomacromolecules</i> , 2008, 9, 3141-3149.	2.6	17
43	Ring opening polymerization of $\epsilon$ -caprolactone in the presence of wet $\beta$ -cyclodextrin: effect of the operative pressure and of water molecules in the $\beta$ -cyclodextrin cavity. <i>RSC Advances</i> , 2016, 6, 90290-90299.	1.7	17
44	Water-Borne Isocyanate-Free Polyurethane Hydrogels with Adaptable Functionality and Behavior. <i>Macromolecular Rapid Communications</i> , 2021, 42, e2000482.	2.0	17
45	Supported ATRP of fluorinated methacrylates in supercritical carbon dioxide: preparation of scCO <sub>2</sub> soluble polymers with low catalytic residues. <i>Chemical Communications</i> , 2008, , 5803.	2.2	16
46	Cobalt-Mediated Radical Polymerization of Vinyl Acetate and Acrylonitrile in Supercritical Carbon Dioxide. <i>Macromolecular Rapid Communications</i> , 2016, 37, 539-544.	2.0	16
47	Synthesis of microsphere-loaded porous polymers by combining emulsion and dispersion polymerisations in supercritical carbon dioxide. <i>Chemical Communications</i> , 2012, 48, 8356.	2.2	15
48	Small-Angle X-ray Scattering Insights into the Architecture-Dependent Emulsifying Properties of Amphiphilic Copolymers in Supercritical Carbon Dioxide. <i>Journal of Physical Chemistry B</i> , 2015, 119, 1706-1716.	1.2	15
49	Enhanced and Reusable Poly(hydroxy urethane)-Based Low Temperature Hot-Melt Adhesives. <i>ACS Polymers Au</i> , 2022, 2, 194-207.	1.7	15
50	Functional Polyethylenes by Organometallic-Mediated Radical Polymerization of Biobased Carbonates. <i>ACS Macro Letters</i> , 2021, 10, 313-320.	2.3	14
51	Online Monitoring of Heterogeneous Polymerizations in Supercritical Carbon Dioxide by Raman Spectroscopy. <i>ChemPhysChem</i> , 2012, 13, 2666-2670.	1.0	13
52	En Route to CO <sub>2</sub> -Based (a)Cyclic Carbonates and Polycarbonates from Alcohols Substrates by Direct and Indirect Approaches. <i>Catalysts</i> , 2022, 12, 124.	1.6	13
53	Optimizing support properties of heterogeneous catalysts for the coupling of carbon dioxide with epoxides. <i>Chemical Engineering Journal</i> , 2019, 371, 719-729.	6.6	10
54	Heterogenization of a cyclocarbonation catalyst: Optimization and kinetic study. <i>Catalysis Today</i> , 2019, 334, 140-155.	2.2	10

#	ARTICLE	IF	CITATIONS
55	Introducing Polyhydroxyurethane Hydrogels and Coatings for Formaldehyde Capture. ACS Applied Materials & Interfaces, 2021, 13, 54396-54408.	4.0	10
56	A Switchable Domino Process for the Construction of Novel CO <sub>2</sub> -Sourced Sulfur-Containing Building Blocks and Polymers. Angewandte Chemie, 2019, 131, 11894-11899.	1.6	8
57	A photocleavable stabilizer for the preparation of PHEMA nanogels by dispersion polymerization in supercritical carbon dioxide. Polymer Chemistry, 2017, 8, 581-591.	1.9	7
58	Fast and Facile One-Pot One-Step Preparation of Nonsocyanate Polyurethane Hydrogels in Water at Room Temperature. ACS Sustainable Chemistry and Engineering, 0, , .	3.2	7
59	Cascade Transformation of Carbon Dioxide and Alkyne-1, <i>n</i> -diols into Densely Substituted Cyclic Carbonates. ACS Catalysis, 2022, 12, 2854-2860.	5.5	7
60	Facile construction of functional poly(monothiocarbonate) copolymers under mild operating conditions. Polymer Chemistry, 2022, 13, 3076-3090.	1.9	7
61	Catalyst-Free Approach for the Degradation of Bio- and CO <sub>2</sub> -Sourced Polycarbonates: A Step toward a Circular Plastic Economy. ACS Sustainable Chemistry and Engineering, 2022, 10, 8863-8875.	3.2	7
62	Exovinylene Cyclic Carbonates: Multifaceted CO <sub>2</sub> -Based Building Blocks for Modern Chemistry and Polymer Science. Angewandte Chemie, 2022, 134, .	1.6	4
63	Unifying Step-Growth Polymerization and On-Demand Cascade Ring-Closure Depolymerization via Polymer Skeletal Editing. Macromolecules, 2022, 55, 4637-4646.	2.2	4