

# Abraham Joy

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1332037/publications.pdf>

Version: 2024-02-01

78  
papers

2,865  
citations

159585

30  
h-index

182427

51  
g-index

78  
all docs

78  
docs citations

78  
times ranked

3287  
citing authors

#	ARTICLE	IF	CITATIONS
1	Charge Migration in DNA: Ion-Gated Transport. <i>Science</i> , 2001, 294, 567-571.	12.6	373
2	Asymmetric Photoreactions within Zeolites: Role of Confinement and Alkali Metal Ions. <i>Accounts of Chemical Research</i> , 2003, 36, 509-521.	15.6	168
3	Multi-purposable filaments of HPMC for 3D printing of medications with tailored drug release and timed-absorption. <i>International Journal of Pharmaceutics</i> , 2018, 544, 285-296.	5.2	112
4	Halogenated Squaraine Dyes as Potential Photochemotherapeutic Agents. Synthesis and Study of Photophysical Properties and Quantum Efficiencies of Singlet Oxygen Generation*. <i>Photochemistry and Photobiology</i> , 1997, 65, 783-790.	2.5	106
5	Peptidomimetic Polyurethanes Inhibit Bacterial Biofilm Formation and Disrupt Surface Established Biofilms. <i>Journal of the American Chemical Society</i> , 2021, 143, 9440-9449.	13.7	91
6	Photochemistry of a Tropolone Ether and 2,2-Dimethyl-1-(2H)-naphthalenones within a Zeolite: Enhanced Diastereoselectivity via Confinement. <i>Journal of the American Chemical Society</i> , 2000, 122, 728-729.	13.7	85
7	Photoresponsive Coumarin Polyesters That Exhibit Cross-Linking and Chain Scission Properties. <i>Macromolecules</i> , 2013, 46, 5133-5140.	4.8	82
8	Chiral Photochemistry within Zeolites. <i>Chemistry - A European Journal</i> , 2000, 6, 1287-1293.	3.3	77
9	Chirally Modified Zeolites as Reaction Media: Photochemistry of an Achiral Tropolone Ether. <i>Organic Letters</i> , 2000, 2, 119-121.	4.6	74
10	Lower Critical Solution Temperature-Driven Self-Coacervation of Nonionic Polyester Underwater Adhesives. <i>ACS Nano</i> , 2020, 14, 8359-8367.	14.6	70
11	Direct Observation of the Interplay of Catechol Binding and Polymer Hydrophobicity in a Mussel-Inspired Elastomeric Adhesive. <i>ACS Central Science</i> , 2018, 4, 1420-1429.	11.3	69
12	Mussel-Inspired Polyesters with Aliphatic Pendant Groups Demonstrate the Importance of Hydrophobicity in Underwater Adhesion. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700506.	3.7	68
13	Folate Receptor-Targeted Polymeric Micellar Nanocarriers for Delivery of Orlistat as a Repurposed Drug against Triple-Negative Breast Cancer. <i>Molecular Cancer Therapeutics</i> , 2016, 15, 221-231.	4.1	65
14	Selective one-electron oxidation of duplex DNA oligomers: reaction at thymines. <i>Organic and Biomolecular Chemistry</i> , 2008, 6, 916.	2.8	60
15	Design principles for creating synthetic underwater adhesives. <i>Chemical Society Reviews</i> , 2021, 50, 13321-13345.	38.1	57
16	A Library of Thermoresponsive, Coacervate-Forming Biodegradable Polyesters. <i>Macromolecules</i> , 2015, 48, 3834-3842.	4.8	54
17	Predicting biomaterial property-dendritic cell phenotype relationships from the multivariate analysis of responses to polymethacrylates. <i>Biomaterials</i> , 2012, 33, 1699-1713.	11.4	51
18	A Library of Multifunctional Polyesters with Peptide-Like Pendant Functional Groups. <i>Biomacromolecules</i> , 2013, 14, 2489-2493.	5.4	51

#	ARTICLE	IF	CITATIONS
19	Asymmetric Induction With Cyclodextrins: Photocyclization of Tropolone Alkyl Ethers. <i>Tetrahedron</i> , 2000, 56, 7003-7009.	1.9	50
20	Asymmetrically modified zeolite as a medium for enantioselective photoreactions: Reactions from spin forbidden excited states. <i>Tetrahedron Letters</i> , 1997, 38, 8825-8828.	1.4	47
21	One-Electron Oxidation of DNA Oligomers That Lack Guanine: A Reaction and Strand Cleavage at Remote Thymines by Long-Distance Radical Cation Hopping. <i>Journal of the American Chemical Society</i> , 2006, 128, 5346-5347.	13.7	47
22	Control of Surface Chemistry, Substrate Stiffness, and Cell Function in a Novel Terpolymer Methacrylate Library. <i>Langmuir</i> , 2011, 27, 1891-1899.	3.5	46
23	Bactericidal Peptidomimetic Polyurethanes with Remarkable Selectivity against <i>Escherichia coli</i> . <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 2588-2597.	5.2	40
24	Structure-Activity Study of Antibacterial Poly(ester urethane)s with Uniform Distribution of Hydrophobic and Cationic Groups. <i>Biomacromolecules</i> , 2019, 20, 1675-1682.	5.4	40
25	The effect of pendant group structure on the thermoresponsive properties of <i>N</i> -substituted polyesters. <i>Polymer Chemistry</i> , 2017, 8, 7195-7206.	3.9	36
26	A Solvent and Initiator Free, Low-Modulus, Degradable Polyester Platform with Modular Functionality for Ambient-Temperature 3D Printing. <i>Macromolecules</i> , 2016, 49, 2429-2437.	4.8	35
27	Nontoxic Cationic Coumarin Polyester Coatings Prevent <i>Pseudomonas aeruginosa</i> Biofilm Formation. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 6704-6711.	8.0	35
28	Viscosity Attunes the Adhesion of Bioinspired Low Modulus Polyester Adhesive Sealants to Wet Tissues. <i>Biomacromolecules</i> , 2019, 20, 2577-2586.	5.4	35
29	Oxidative Damage to DNA: A Counterion-Assisted Addition of Water to Ionized DNA. <i>Journal of the American Chemical Society</i> , 2006, 128, 10795-10800.	13.7	34
30	Poly(ethylene glycol) as a sensitive regulator of cell survival fate on polymeric biomaterials: the interplay of cell adhesion and pro-oxidant signaling mechanisms. <i>Soft Matter</i> , 2010, 6, 5196.	2.7	31
31	Bacterial Membrane Selective Antimicrobial Peptide-Mimetic Polyurethanes: Structure-Property Correlations and Mechanisms of Action. <i>Biomacromolecules</i> , 2019, 20, 4096-4106.	5.4	31
32	Opposing Effects of Side-Chain Flexibility and Hydrogen Bonding on the Thermal, Mechanical, and Rheological Properties of Supramolecularly Cross-Linked Polyesters. <i>Macromolecules</i> , 2018, 51, 9294-9305.	4.8	29
33	The influence of chiral auxiliaries is enhanced within zeolites. <i>Tetrahedron Letters</i> , 2000, 41, 8231-8235.	1.4	28
34	Baylis-Hillman Reaction as a Versatile Platform for the Synthesis of Diverse Functionalized Polymers by Chain and Step Polymerization. <i>Macromolecules</i> , 2014, 47, 1258-1268.	4.8	28
35	Kinetics of UV Irradiation Induced Chain Scission and Cross-Linking of Coumarin-Containing Polyester Ultrathin Films. <i>Macromolecules</i> , 2014, 47, 2891-2898.	4.8	27
36	Photoinduced Polymer Chain Scission of Alkoxyphenacyl Based Polycarbonates. <i>ACS Macro Letters</i> , 2012, 1, 1184-1188.	4.8	25

#	ARTICLE	IF	CITATIONS
37	Enhanced Enantio- and Diastereoselectivity via Confinement and Cation Binding: Yang Photocyclization of 2-Benzoyladamantane Derivatives within Zeolites. <i>Journal of Organic Chemistry</i> , 2002, 67, 8339-8350.	3.2	23
38	Role of cations and confinement in asymmetric photochemistry: enantio- and diastereo-selective photocyclization of tropolone derivatives within zeolites. <i>Organic and Biomolecular Chemistry</i> , 2005, 3, 3045.	2.8	23
39	Thread Size and Polymer Composition of 3D Printed and Electrospun Wound Dressings Affect Wound Healing Outcomes in an Excisional Wound Rat Model. <i>Biomacromolecules</i> , 2020, 21, 4030-4042.	5.4	23
40	Modification of a conventional polyurethane composition provides significant anti-biofilm activity against <i>Escherichia coli</i> . <i>Polymer Chemistry</i> , 2018, 9, 3195-3198.	3.9	22
41	A hydrophilic coumarin-based polyester for ambient-temperature initiator-free 3D printing: Chemistry, rheology and interface formation. <i>Polymer</i> , 2018, 152, 9-17.	3.8	21
42	Introduction of Hydrogen Bonds Improves the Shape Fidelity of Viscoelastic 3D Printed Scaffolds While Maintaining Their Low-Temperature Printability. <i>Macromolecules</i> , 2020, 53, 3690-3699.	4.8	21
43	Impact of cell density on the bioprinting of gelatin methacrylate (GelMA) bioinks. <i>Bioprinting</i> , 2021, 22, e00131.	5.8	20
44	Use of a confined space (zeolite) in enantio- and diastereo-selective photoreactions. <i>Microporous and Mesoporous Materials</i> , 2001, 48, 319-328.	4.4	19
45	Micropatterned Coumarin Polyester Thin Films Direct Neurite Orientation. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 19655-19667.	8.0	18
46	Thermoresponsive dual emission nanosensor based on quantum dots and dye labeled poly(N-isopropylacrylamide). <i>Polymer Chemistry</i> , 2015, 6, 2813-2816.	3.9	18
47	Efficient Protein Encapsulation within Thermoresponsive Coacervate-Forming Biodegradable Polyesters. <i>ACS Macro Letters</i> , 2018, 7, 477-481.	4.8	16
48	Light-Activated Adhesion and Debonding of Underwater Pressure-Sensitive Adhesives. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 29048-29057.	8.0	16
49	Modulating the crystallinity, mechanical properties, and degradability of poly( $\mu$ -caprolactone) derived polyesters by statistical and alternating copolymerization. <i>Polymer Chemistry</i> , 2019, 10, 2579-2588.	3.9	15
50	Effect of Dexamethasone on Room Temperature Three-Dimensional Printing, Rheology, and Degradation of a Low Modulus Polyester for Soft Tissue Engineering. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 846-858.	5.2	15
51	Synergism between Rifampicin and Cationic Polyurethanes Overcomes Intrinsic Resistance of <i>Escherichia coli</i> . <i>Biomacromolecules</i> , 2021, 22, 2910-2920.	5.4	15
52	Assessment of alkoxyphenacyl-based polycarbonates as a potential platform for controlled delivery of a model anti-glaucoma drug. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2016, 107, 56-66.	4.3	14
53	Photoresponsive polyesters by incorporation of alkoxyphenacyl or coumarin chromophores along the backbone. <i>Photochemical and Photobiological Sciences</i> , 2014, 13, 412-421.	2.9	13
54	Sequence analysis of cyclic polyester copolymers using ion mobility tandem mass spectrometry. <i>International Journal of Mass Spectrometry</i> , 2018, 429, 151-157.	1.5	13

#	ARTICLE	IF	CITATIONS
55	Advances in Photoreactive Tissue Adhesives Derived from Natural Polymers. ChemEngineering, 2020, 4, 32.	2.4	13
56	Biocompatibility and In Vivo Tolerability of a New Class of Photoresponsive Alkoxyphenacyl-Based Polycarbonates. Journal of Pharmaceutical Sciences, 2013, 102, 1650-1660.	3.3	12
57	Role of pendant side-chain length in determining polymer 3D printability. Polymer Chemistry, 2019, 10, 5543-5554.	3.9	12
58	Cooperative Multivalent Weak and Strong Interfacial Interactions Enhance the Adhesion of Mussel-Inspired Adhesives. Macromolecules, 2021, 54, 5417-5428.	4.8	12
59	Reorganization of an Amphiphilic Glassy Polymer Surface in Contact with Water Probed by Contact Angle and Sum Frequency Generation Spectroscopy. Macromolecules, 2018, 51, 5114-5120.	4.8	11
60	Modification of narrow-spectrum peptidomimetic polyurethanes with fatty acid chains confers broad-spectrum antibacterial activity. Polymer International, 2019, 68, 1255-1262.	3.1	11
61	Simple, rapid, and highly sensitive detection of diphosgene and triphosgene by spectrophotometric methods. Talanta, 2009, 80, 231-235.	5.5	10
62	Self-emulsion polymerization of baylis-hillman-derived hydroxymethyl-substituted acrylates. Journal of Polymer Science Part A, 2015, 53, 1743-1747.	2.3	10
63	Computational modeling of in vitro biological responses on polymethacrylate surfaces. Polymer, 2011, 52, 2650-2660.	3.8	9
64	Dual functionalized telechelic block copolymers with reproducible block sizes prepared by microwave assisted RAFT polymerization. Polymer, 2015, 66, 110-121.	3.8	9
65	Mannose-based graft polyesters with tunable binding affinity to concanavalin A. Journal of Polymer Science Part A, 2017, 55, 3908-3917.	2.3	9
66	Synthesis, Rheology, and Assessment of 3D Printability of Multifunctional Polyesters for Extrusion-Based Direct-Write 3D Printing. ACS Applied Polymer Materials, 2021, 3, 6618-6631.	4.4	9
67	Alternating and random-sequence polyesters with distinct physical properties. Polymer Chemistry, 2017, 8, 2397-2404.	3.9	8
68	Colloid silica nanoparticles trapped morphology of polymer blends during solvent evaporation. European Polymer Journal, 2018, 107, 164-172.	5.4	8
69	Structural insight into the viscoelastic behaviour of elastomeric polyesters: effect of the nature of fatty acid side chains and the degree of unsaturation. Polymer Chemistry, 2020, 11, 5216-5224.	3.9	8
70	Elucidating the Molecular Interactions of Encapsulated Doxorubicin within a Nonionic, Thermoresponsive Polyester Coacervate. ACS Applied Bio Materials, 2020, 3, 4626-4634.	4.6	6
71	Polaronic semiconductor behavior of long-range charge transfer in DNA oligomers in solution: controlling barriers to long-distance radical cation migration in DNA with thymine analogs. Faraday Discussions, 2006, 131, 357-365.	3.2	5
72	An Osteoconductive Antibiotic Bone Eluting Putty with a Custom Polymer Matrix. Polymers, 2016, 8, 247.	4.5	5

#	ARTICLE	IF	CITATIONS
73	Formulation and photoirradiation parameters that influenced photoresponsive drug delivery using alkoxyphenacyl-based polycarbonates. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2014, 88, 962-972.	4.3	4
74	Effects of Molecular Weight Reduction on Brittleâ€“Ductile Transition and Elastic Yielding Due to Noninvasive $^{13}\text{I}$ Irradiation on Polymer Glasses. <i>Macromolecules</i> , 2017, 50, 2447-2455.	4.8	4
75	Pendant Functionalized Polyester Nanofibers with Dual Cargo Release. <i>ACS Applied Bio Materials</i> , 2019, 2, 4856-4863.	4.6	4
76	Single Chain Hydration and Dynamics of Mussel-Inspired Soybean-Based Adhesive. <i>Jom</i> , 2021, 73, 2460-2470.	1.9	2
77	Engineering Alkoxyphenacyl-Polycarbonate Nanoparticles for Potential Application in Near-Infrared Light-Modulated Drug Delivery via Photon Up-Conversion Process. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 4867-4881.	0.9	1
78	Fabrication and Bioactivity of Peptideâ€“Conjugated Biomaterial Tissue Engineering Constructs. <i>Macromolecular Rapid Communications</i> , 2023, 44, .	3.9	1