

# Biswajit Ray

## List of Publications by Year in descending order

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72  
papers

2,601  
citations

201674

27  
h-index

189892

50  
g-index

75  
all docs

75  
docs citations

75  
times ranked

2385  
citing authors

#	ARTICLE	IF	CITATIONS
1	RAFT Polymerization of N-Isopropylacrylamide in the Absence and Presence of Y(OTf) <sub>3</sub> : Simultaneous Control of Molecular Weight and Tacticity. <i>Macromolecules</i> , 2004, 37, 1702-1710.	4.8	220
2	Synthesis of Isotactic Poly(N-isopropylacrylamide) by RAFT Polymerization in the Presence of Lewis Acid. <i>Macromolecules</i> , 2003, 36, 543-545.	4.8	189
3	Highly Versatile Organostibine Mediators for Living Radical Polymerization. <i>Journal of the American Chemical Society</i> , 2004, 126, 13908-13909.	13.7	189
4	Effect of Tacticity of Poly(N-isopropylacrylamide) on the Phase Separation Temperature of Its Aqueous Solutions. <i>Polymer Journal</i> , 2005, 37, 234-237.	2.7	180
5	Highly Controlled Living Radical Polymerization through Dual Activation of Organobismuthines. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 1304-1306.	13.8	140
6	Highly Controlled Synthesis of Poly(N-vinylpyrrolidone) and Its Block Copolymers by Organostibine-Mediated Living Radical Polymerization. <i>Macromolecules</i> , 2006, 39, 5259-5265.	4.8	113
7	Synthesis of Well-Defined Amphiphilic Poly( $\mu$ -caprolactone)- <i>b</i> -poly(N-vinylpyrrolidone) Block Copolymers via the Combination of ROP and Xanthate-Mediated RAFT Polymerization. <i>Macromolecules</i> , 2011, 44, 2465-2473.	4.8	73
8	Highly efficient polyurethane ionomer corrosion inhibitor: the effect of chain structure. <i>RSC Advances</i> , 2011, 1, 199.	3.6	66
9	Functionalized Graphene Tagged Polyurethanes for Corrosion Inhibitor and Sustained Drug Delivery. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 3351-3363.	5.2	64
10	Brominated Graphene as Mimetic Peroxidase for Sulfide Ion Recognition. <i>Analytical Chemistry</i> , 2017, 89, 783-791.	6.5	63
11	Controlled drug release through regulated biodegradation of poly(lactic acid) using inorganic salts. <i>International Journal of Biological Macromolecules</i> , 2017, 104, 487-497.	7.5	61
12	Targeted Delivery of Doxorubicin-Loaded Poly ( $\mu$ -caprolactone)- <i>b</i> -Poly (N-vinylpyrrolidone) Micelles Enhances Antitumor Effect in Lymphoma. <i>PLoS ONE</i> , 2014, 9, e94309.	2.5	60
13	Effects of Tacticity and Molecular Weight of Poly(N-isopropylacrylamide) on Its Glass Transition Temperature. <i>Macromolecules</i> , 2011, 44, 5822-5824.	4.8	55
14	Dispersion polymerization of acrylamide: Part II. 2,2'-Azobisisobutyronitrile initiator. <i>Journal of Polymer Science Part A</i> , 1999, 37, 493-499.	2.3	53
15	Methotrexate-Loaded Four-Arm Star Amphiphilic Block Copolymer Elicits CD8 <sup>+</sup> T Cell Response against a Highly Aggressive and Metastatic Experimental Lymphoma. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 20021-20033.	8.0	49
16	Electrochemical sensing of hydrogen peroxide using brominated graphene as mimetic catalase. <i>Electrochimica Acta</i> , 2017, 258, 1435-1444.	5.2	43
17	Colorimetric detection of hydrogen peroxide and glucose using brominated graphene. <i>Analytical Methods</i> , 2017, 9, 6675-6681.	2.7	42
18	(S)-2-(Ethyl propionate)-(O-ethyl xanthate) and (S)-2-(Ethyl isobutyrate)-(O-ethyl xanthate)-mediated RAFT polymerization of N-vinylpyrrolidone. <i>Polymer Bulletin</i> , 2010, 65, 97-110.	3.3	40

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19	Synthesis of well-defined amphiphilic poly(d,l-lactide)-b-poly(N-vinylpyrrolidone) block copolymers using ROP and xanthate-mediated RAFT polymerization. <i>Polymer</i> , 2012, 53, 5743-5753.	3.8	39
20	Functionalized poly(vinylidene fluoride) nanohybrid for superior fuel cell membrane. <i>Journal of Membrane Science</i> , 2015, 481, 124-136.	8.2	39
21	Synthesis and Characterization of Stereocontrolled Poly( <i>N</i> -isopropylacrylamide) Hydrogel Prepared in the Presence of Y(OTf) <sub>3</sub> Lewis Acid. <i>Langmuir</i> , 2010, 26, 6775-6782.	3.5	36
22	Synthesis of alkyne-terminated xanthate RAFT agents and their uses for the controlled radical polymerization of <i>N</i> -vinylpyrrolidone and the synthesis of its block copolymer using click chemistry. <i>Journal of Applied Polymer Science</i> , 2013, 127, 4305-4317.	2.6	34
23	Enhanced catalytic and antibacterial activities of silver nanoparticles immobilized on poly( <i>N</i> -vinyl pyrrolidone)-grafted graphene oxide. <i>RSC Advances</i> , 2015, 5, 81994-82004.	3.6	31
24	Nanostructure-Controlled Shape Memory Effect in Polyurethanes. <i>Journal of Physical Chemistry C</i> , 2018, 122, 11167-11176.	3.1	31
25	Synthesis and Study of the Properties of Stereocontrolled Poly( <i>N</i> -isopropylacrylamide) Gel and Its Linear Homopolymer Prepared in the Presence of a Y(OTf) <sub>3</sub> Lewis Acid: Effect of the Composition of Methanol-Water Mixtures as Synthesis Media. <i>Langmuir</i> , 2012, 28, 7014-7022.	3.5	29
26	Efficacy of polyurethane graft on cyclodextrin to control drug release for tumor treatment. <i>Journal of Colloid and Interface Science</i> , 2019, 534, 215-227.	9.4	28
27	Graphene as a chain extender of polyurethanes for biomedical applications. <i>RSC Advances</i> , 2016, 6, 58628-58640.	3.6	27
28	Novel shape memory behaviour in IPDI based polyurethanes: Influence of nanoparticle. <i>Polymer</i> , 2017, 110, 95-104.	3.8	26
29	Conducting nano-channels in an induced piezoelectric polymeric matrix using swift heavy ions and subsequent functionalization. <i>Journal of Materials Chemistry</i> , 2012, 22, 3955.	6.7	25
30	Osteoconductive Amine-Functionalized Graphene-Poly(methyl methacrylate) Bone Cement Composite with Controlled Exothermic Polymerization. <i>Bioconjugate Chemistry</i> , 2017, 28, 2254-2265.	3.6	25
31	Synthesis, characterization, and drug release properties of poly( <i>N</i> -isopropylacrylamide) gels prepared in methanol-water cononsolvent medium. <i>Journal of Applied Polymer Science</i> , 2012, 125, 2000-2009.	2.6	23
32	Highly selective fluorescence "turn off" sensing of picric acid and efficient cell labelling by water-soluble luminescent anthracene-bridged poly( <i>N</i> -vinyl pyrrolidone). <i>Analyst</i> , 2019, 144, 3620-3634.	3.5	23
33	Novel Initiating System for the Stereocontrolled Radical Polymerization of Acrylamides: Alkyl Bromide/Rare Earth Metal Triflate System. <i>Polymer Journal</i> , 2004, 36, 728-736.	2.7	22
34	Synthesis and characterization of porous poly( <i>N</i> -isopropylacrylamide) hydrogels prepared in ethanol-water mixtures. <i>Journal of Applied Polymer Science</i> , 2011, 121, 2422-2429.	2.6	22
35	Tadpole-shaped $\beta$ -cyclodextrin-tagged poly( <i>N</i> -vinylpyrrolidone): synthesis, characterization and studies of its complexation with phenolphthalein and anti tumor activities. <i>RSC Advances</i> , 2015, 5, 15547-15558.	3.6	22
36	Study of the Fluorescence Based Applications of Pyrene-Tagged Poly( <i>N</i> -vinyl-2-pyrrolidone). <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1630-1640.	5.2	20

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37	(S)-ethyl propionate-(O)-ethyl xanthate-and (S)-Ethyl isobutyrate-(O)-ethyl Tj ETC 2946-2955.	2.6	19
38	Nanochannel conduction in piezoelectric polymeric membrane using swift heavy ions and nanoclay. RSC Advances, 2013, 3, 6147.	3.6	18
39	Synthesis, characterization, and solution behavior of well-defined double hydrophilic linear amphiphilic poly (N-isopropylacrylamide)-b-poly ( $\mu$ -caprolactone)-b-poly (N-isopropylacrylamide) triblock copolymers. Colloid and Polymer Science, 2014, 292, 1405-1418.	2.1	18
40	Colorimetric detection of hydrogen peroxide and cholesterol using Fe <sub>3</sub> O <sub>4</sub> -brominated graphene nanocomposite. Analytical and Bioanalytical Chemistry, 2022, 414, 2131-2145.	3.7	17
41	Self-assembly, doxorubicin-loading and antibacterial activity of well-defined ABA-type amphiphilic poly(N-vinylpyrrolidone)-b-poly( <i>d</i> -, <i>l</i> -lactide)-b-poly(N-vinyl pyrrolidone) triblock copolymers. RSC Advances, 2016, 6, 25864-25876.	3.6	16
42	Cell proliferation influenced by matrix compliance of gelatin grafted poly( <i>d,l</i> -Lactide) three dimensional scaffolds. Colloids and Surfaces B: Biointerfaces, 2018, 166, 170-178.	5.0	15
43	Doxorubicin loaded pH responsive biodegradable ABA-type Amphiphilic PEG-b-aliphatic Polyketal-b-PEG block copolymer for therapy against aggressive murine lymphoma. Nanomedicine: Nanotechnology, Biology, and Medicine, 2020, 24, 102128.	3.3	14
44	Synthesis and characterization of novel amphiphilic biocompatible block-copolymers of poly(N-isopropylacrylamide)-b-poly( <i>l</i> -phenylalanine methyl ester) by RAFT polymerization. Polymer, 2020, 203, 122760.	3.8	14
45	Tailored Chemical Properties of 4-Arm Star Shaped Poly( <i>d</i> -, <i>l</i> -lactide) as Cell Adhesive Three-Dimensional Scaffolds. Bioconjugate Chemistry, 2017, 28, 1236-1250.	3.6	13
46	Synthesis and self-assembly properties of well-defined four-arm star poly( $\mu$ -caprolactone)-b-poly(N-vinylpyrrolidone) amphiphilic block copolymers. Polymer Bulletin, 2013, 70, 3201-3220.	3.3	12
47	Study of the effect of isotacticity on some physical properties of poly(N-isopropylacrylamide). Colloid and Polymer Science, 2015, 293, 1749-1757.	2.1	11
48	Synthesis of fluorescence poly(N-vinylpyrrolidone) via click chemistry using azide-terminated xanthate mediator (S)-2-(4-azidobutyl propionate)-(O)-ethyl xanthate). International Journal of Polymeric Materials and Polymeric Biomaterials, 2016, 65, 269-276.	3.4	11
49	Effect of tacticity and molecular weight on the rheological properties of poly(N-isopropylacrylamide) gels in benzyl alcohol. Journal of Rheology, 2017, 61, 1345-1357.	2.6	11
50	Fluorescent- $\epsilon$ -functionalized graphene oxide for selective labeling of tumor cells. Journal of Biomedical Materials Research - Part A, 2019, 107, 1917-1924.	4.0	11
51	Grafted cyclodextrin as carrier for control drug delivery and efficient cell killing. Journal of Biomedical Materials Research - Part A, 2019, 107, 434-444.	4.0	10
52	Electron beam-induced piezoelectric phase in poly(vinylidene fluoride) nanohybrid: effect at the molecular level. Polymer International, 2015, 64, 212-221.	3.1	9
53	Self-assembly of Novel Poly( <i>d,l</i> -Lactide-co-Glycolide)-b-Poly(N-Vinylpyrrolidone) (PLGA-b-PNVP) Amphiphilic Diblock Copolymers. Colloid and Polymer Science, 2016, 294, 399-407.	2.1	9
54	Functionalized polythiophene for corrosion inhibition and photovoltaic application. Journal of Applied Polymer Science, 2021, 138, 51306.	2.6	9

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55	Synthesis of low polydisperse isotactic poly(N-isopropylacrylamide)s in environment-friendly and less toxic methanol-water mixtures by RAFT polymerization. <i>Journal of Chemical Sciences</i> , 2016, 128, 415-420.	1.5	6
56	In Vitro Anticancer Drug Delivery Using Amphiphilic Poly( <i>N</i> -vinylpyrrolidone)- <i>b</i> -Poly( <i>ε</i> -caprolactone)- <i>b</i> -Poly( <i>N</i> -vinylpyrrolidone) Block Copolymer as Micellar Nanocarrier. <i>ChemistrySelect</i> , 2018, 3, 8833-8843.	1.5	6
57	Mangiferin as chain transfer agent: effect on the molecular weight of poly(methyl methacrylate) and polystyrene. <i>Polymer Bulletin</i> , 2015, 72, 1407-1416.	3.3	5
58	Polymerization of 1-((2-propynyl)-3-methylimidazolium Bromide using Cyclometalated Pd(II) Catalysts and Study of the Interaction of Ensuing Oligomer with BSA. <i>ChemistrySelect</i> , 2017, 2, 6000-6008.	1.5	5
59	Water Soluble Fluorescent Graphene Nanodots. <i>ChemNanoMat</i> , 2018, 4, 1177-1188.	2.8	5
60	Synthesis of ABA-type double hydrophilic amphiphilic PU-based block copolymers of poly( <i>N</i> -Vinylpyrrolidone) and poly( <i>N</i> -isopropylacrylamide) via click chemistry. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2021, 58, 192-205.	2.2	5
61	L-menthol-based xanthate mediator for RAFT polymerization of vinyl acetate. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2020, 57, 299-309.	2.2	4
62	Synthesis, characterization, and application of novel amphiphilic poly(D-glucosaminidoethyl) triblock copolymers. <i>Journal of Applied Polymer Science</i> , 2013, 128, 1369-1380.	2.6	3
63	Effect of Isotacticity of Linear Poly(N-isopropylacrylamide) on its Gelation in Benzyl Alcohol. <i>Journal of Chemical Sciences</i> , 2016, 128, 941-950.	1.5	3
64	L-menthol-based initiators for atom transfer radical polymerization of styrene. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47964.	2.6	3
65	Selective nitration of phenol to <i>o</i> -nitrophenol in the presence of metal-free reduced graphene oxide at room temperature. <i>New Journal of Chemistry</i> , 2020, 44, 10878-10884.	2.8	3
66	Effect of L-menthol chain-end on the optical rotation, chirality, tacticity and thermal properties of polystyrene prepared by ATRP and polyvinylacetates prepared by RAFT polymerization: A molecular weight dependence study. <i>Materials Today Communications</i> , 2021, 26, 101705.	1.9	3
67	Dextrin and polyurethane graft copolymers as drug carrier: Synthesis, characterization, drug release, biocompatibility and in-vitro toxicity. <i>Carbohydrate Polymer Technologies and Applications</i> , 2021, 2, 100171.	2.6	2
68	Functionalized polyurethane composite gel electrolyte with cosensitized photoanode for higher solar cell efficiency using a passivation layer. <i>Nanoscale Advances</i> , 2022, 4, 1199-1212.	4.6	2
69	Study of the properties of luminescent poly[1-(2-propynyl)-3-methylimidazolium bromide] oligomers prepared using a Mo(CO) <sub>6</sub> /phenol catalyst. <i>RSC Advances</i> , 2015, 5, 20270-20275.	3.6	1
70	Gelatin grafted poly(D,L-lactide) as an inhibitor of protein aggregation: An in vitro case study. <i>Biopolymers</i> , 2020, 111, e23383.	2.4	1
71	Effect of n-Alkyl Side Chain Length on the Thermal and Rheological Properties of Poly N-(3-(alkylamino)) Tj ETQq1 1 0.78431 2021, 222, 2100118.	2.2	1
72	Study of the Fluorescence based Applications of Water Soluble (N, P) Doped Carbon Dots Synthesized via Microwave Assisted Green Pyrolysis. <i>Nanoscience and Nanotechnology - Asia</i> , 2020, 10, 827-839.	0.7	1