Pijush Kanti Chattopadhyay

List of Publications by Year
in descending order

50 papers	1,438 citations	279487 23 h-index	344852 36 g-index
50 all docs	50 docs citations	50 times ranked	1066 citing authors

#	Article	IF	Citations
1	Starch-based blends and composites. , 2022, , 205-236.		3
2	Chitin and chitosan-based blends and composites. , 2022, , 123-203.		2
3	Light-Emitting Redox Polymers for Sensing and Removal-Reduction of Cu(II): Roles of Hydrogen Bonding in Nonconventional Fluorescence. ACS Applied Polymer Materials, 2022, 4, 1643-1656.	2.0	11
4	Ratiometric pH Sensing, Photophysics, and Cell Imaging of Nonaromatic Light-Emitting Polymers. ACS Applied Bio Materials, 2022, 5, 2990-3005.	2.3	9
5	Nontraditional Redox Active Aliphatic Luminescent Polymer for Ratiometric pH Sensing and Sensingâ€Removalâ€Reduction of Cu(II): Strategic Optimization of Composition. Macromolecular Rapid Communications, 2022, 43, .	2.0	7
6	Nonconjugated Biocompatible Macromolecular Luminogens for Sensing and Removals of Fe(III) and Cu(II): DFT Studies on Selective Coordination(s) and Onâ€Off Sensing. Macromolecular Rapid Communications, 2021, 42, e2000522.	2.0	13
7	Scale-up one-pot synthesis of waste collagen and apple pomace pectin incorporated pentapolymer biocomposites: Roles of waste collagen for elevations of properties and unary/ ternary removals of Ti(IV), As(V), and V(V). Journal of Hazardous Materials, 2021, 409, 124873.	6.5	19
8	Nonconventional biocompatible macromolecular AEEgens for sensitive detections and removals of Cu(II) and Fe(III): N and/ or O donor(s) selective coordinations of metal ions. Sensors and Actuators B: Chemical, 2021, 331, 129386.	4.0	15
9	Synthesis of Nonaromatic Macromolecular Luminogens, DFT Studies on Photophysics, and Oâ€Donor Selective Onâˆ’Off Sensors: Contributions of In Situ <i>N</i>â€(Methylol)Acrylamido Comonomers. Advanced Optical Materials, 2021, 9, 2100802.	3.6	11
10	Synthesis of gum tragacanth-grafted pentapolymer hydrogels for As(III) exclusion: Roles of microwaves, RSM optimization, and DFT studies. International Journal of Biological Macromolecules, 2021, 184, 909-925.	3.6	8
11	One-pot synthesis of sodium alginate-grafted-terpolymer hydrogel for As(III) and V(V) removal: In situ anchored comonomer and DFT studies on structures. Journal of Environmental Management, 2021, 294, 112932.	3.8	17
12	MOF and derived materials as aerogels: Structure, property, and performance relations. Coordination Chemistry Reviews, 2021, 446, 214125.	9.5	23
13	Multiâ€Câˆ’C/Câˆ’Nâ€Coupled Lightâ€Emitting Aliphatic Terpolymers: Nâˆ’Hâ€Functionalized Fluorophore Monomers and Highâ€Performance Applications. Chemistry - A European Journal, 2020, 26, 502-516.	1.7	21
14	Synthesis of pH-responsive sodium alginate-g-tetrapolymers via N C and O C coupled in situ monomers: A reusable optimum hydrogel for removal of plant stressors. Journal of Molecular Liquids, 2020, 319, 114097.	2.3	12
15	Fluorescent Terpolymers Using Two Non-Emissive Monomers for Cr(III) Sensors, Removal, and Bio-Imaging. ACS Biomaterials Science and Engineering, 2020, 6, 1397-1407.	2.6	26
16	Intrinsically Fluorescent Biocompatible Terpolymers for Detection and Removal of Bi(III) and Cell Imaging. ACS Applied Bio Materials, 2020, 3, 6155-6166.	2.3	12
17	Synthesis of Biocompatible Aliphatic Terpolymers via In Situ Fluorescent Monomers for Three-in-One Applications: Polymerization of Hydrophobic Monomers in Water. Langmuir, 2020, 36, 6178-6187.	1.6	28
18	Light-Emitting Multifunctional Maleic Acid-<i>co</i>-2-(<i>N</i>-(hydroxymethyl)acrylamido)succinic Acid-<i>co</i>-<i>N</i>-(hydroxymethyl)acrylamide for Fe(III) Sensing, Removal, and Cell Imaging. ACS Omega, 2020, 5, 3333-3345.	1.6	20

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19	Fluorescent Guar Gum-<i>g</i>-Terpolymer via In Situ Acrylamido-Acid Fluorophore-Monomer in Cell Imaging, Pb(II) Sensor, and Security Ink. ACS Applied Bio Materials, 2020, 3, 1995-2006.	2.3	30
20	New property-performance optimization of scalable alginate-g-terpolymer for Ce(IV), Mo(VI), and W(VI) exclusions. Carbohydrate Polymers, 2020, 245, 116370.	5.1	11
21	Review on additives-based structure-property alterations in dyeing of collagenic matrices. Journal of Molecular Liquids, 2019, 293, 111470.	2.3	21
22	Chitosan-grafted tetrapolymer using two monomers: pH-responsive high-performance removals of Cu(II), Cd(II), Pb(II), dichromate, and biphosphate and analyses of adsorbed microstructures. Environmental Research, 2019, 179, 108839.	3.7	38
23	Fluorescent Terpolymers via In Situ Allocation of Aliphatic Fluorophore Monomers: Fe(III) Sensor, Highâ€Performance Removals, and Bioimaging. Advanced Healthcare Materials, 2019, 8, 1900980.	3.9	28
24	In Situ Attachment of Acrylamido Sulfonic Acid-Based Monomer in Terpolymer Hydrogel Optimized by Response Surface Methodology for Individual and/or Simultaneous Removal(s) of M(III) and Cationic Dyes. ACS Omega, 2019, 4, 1763-1780.	1.6	27
25	Processing, Characterization and Application of Natural Rubber Based Environmentally Friendly Polymer Composites. , 2019, , 855-897.		7
26	Collagenic waste and rubber based resin-cured biocomposite adsorbent for high-performance removal(s) of Hg(II), safranine, and brilliant cresyl blue: A cost-friendly waste management approach. Journal of Hazardous Materials, 2019, 369, 199-213.	6.5	37
27	Structures, Properties, and Performancesâ€”Relationships of Polymeric Membranes for Pervaporative Desalination. Membranes, 2019, 9, 58.	1.4	16
28	Starch-g-tetrapolymer hydrogel via in situ attached monomers for removals of Bi(III) and/or Hg(II) and dye(s): RSM-based optimization. Carbohydrate Polymers, 2019, 213, 428-440.	5.1	45
29	Pectin-grafted terpolymer superadsorbent via Nâ€“H activated strategic protrusion of monomer for removals of Cd(II), Hg(II), and Pb(II). Carbohydrate Polymers, 2019, 206, 778-791.	5.1	61
30	Scalable Synthesis of Collagenic-Waste and Natural Rubber-Based Biocomposite for Removal of Hg(II) and Dyes: Approach for Cost-Friendly Waste Management. ACS Omega, 2019, 4, 421-436.	1.6	27
31	Carbohydrate and collagen-based doubly-grafted interpenetrating terpolymer hydrogel via Nâ€“H activated in situ allocation of monomer for superadsorption of Pb(II), Hg(II), dyes, vitamin-C, and p-nitrophenol. Journal of Hazardous Materials, 2019, 369, 746-762.	6.5	71
32	An <i>in situ</i> approach for the synthesis of a gum ghatti-<i>g</i>-interpenetrating terpolymer network hydrogel for the high-performance adsorption mechanism evaluation of Cd(<scp>ii</scp>), Pb(<scp>ii</scp>), Bi(<scp>iii</scp>) and Sb(<scp>iii</scp>). Journal of Materials Chemistry A, 2018, 6, 8078-8100.	5.2	68
33	In Situ Allocation of a Monomer in Pectin-<i>g</i>-Terpolymer Hydrogels and Effect of Comonomer Compositions on Superadsorption of Metal Ions/Dyes. ACS Omega, 2018, 3, 4163-4180.	1.6	43
34	Guar Gum-Grafted Terpolymer Hydrogels for Ligand-Selective Individual and Synergistic Adsorption: Effect of Comonomer Composition. ACS Omega, 2018, 3, 472-494.	1.6	43
35	Quantum chemical predictions of aqueous pK values for OH groups of some Î±-hydroxycarboxylic acids based on ab initio and DFT calculations. Computational and Theoretical Chemistry, 2018, 1125, 29-38.	1.1	19
36	Microstructural analyses of loaded and/or unloaded semisynthetic porous material for understanding of superadsorption and optimization by response surface methodology. Journal of Environmental Chemical Engineering, 2018, 6, 289-310.	3.3	38

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37	Tetrapolymer Network Hydrogels via Gum Ghatti-Grafted and Nâ€"H/Câ€"H-Activated Allocation of Monomers for Composition-Dependent Superadsorption of Metal Ions. ACS Omega, 2018, 3, 10692-10708.	1.6	32
38	Systematic synthesis of pectin-g-(sodium acrylate-co-N-isopropylacrylamide) interpenetrating polymer network for superadsorption of dyes/M(<scp>ii</scp>): determination of physicochemical changes in loaded hydrogels. Polymer Chemistry, 2017, 8, 3211-3237.	1.9	80
39	Fabrication of semisynthetic collagenic materials for mere/synergistic adsorption: A model approach of determining dye allocation by systematic characterization and optimization. International Journal of Biological Macromolecules, 2017, 102, 438-456.	3.6	44
40	Synthesis of guar gum-<i>g</i>-(acrylic acid-<i>co</i>-acrylamide-<i>co</i>-3-acrylamido propanoic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 mechanism of Pb(<scp>ii</scp>)/Cd(<scp>ii</scp>)/Cu(<scp>ii</scp>)/MB/MV. Polymer Chemistry, 2017, 8, 6750-6777.	1.9	90
41	Mechanical and hydrodynamic swelling characteristics of bovine tanned leather post-treated by acrylic and glutaraldehyde tanning agents. Bangladesh Journal of Scientific and Industrial Research, 2016, 51, 1-12.	0.1	4
42	Role of calcium stearate as a dispersion promoter for new generation carbon blackâ€organoclay based rubber nanocomposites for tyre application. Polymer Composites, 2013, 34, 214-224.	2.3	32
43	Contribution of organomodified clay on hybrid microstructures and properties of epoxidized natural rubberâ€based nanocomposites. Polymer Engineering and Science, 2013, 53, 923-930.	1.5	4
44	Influence of interfacial roughness and the hybrid filler microstructures on the properties of ternary elastomeric composites. Composites Part A: Applied Science and Manufacturing, 2011, 42, 1049-1059.	3.8	30
45	Impact of carbon black substitution with nanoclay on microstructure and tribological properties of ternary elastomeric composites. Materials & Design, 2011, 32, 4696-4704.	5.1	16
46	PREDICTION OF EXTENT OF SWELLING IN TERNERY PARTICULATE RUBBER-NANOCOMPOSITES: DEVELOPMENT OF MODIFIED KRAUS EQUATION. Rubber Chemistry and Technology, 2011, 84, 1-23.	0.6	10
47	Studies on novel dual filler based epoxidized natural rubber nanocomposite. Polymer Composites, 2010, 31, 835-846.	2.3	14
48	Transition metal catalyzed oxidative aging of low density polyethylene: effect of manganese (III) acetate. Journal of Polymer Research, 2010, 17, 325-334.	1.2	10
49	Thermal and morphological analysis of thermoplastic polyurethaneâ€"clay nanocomposites: Comparison of efficacy of dual modified laponite vs. commercial montmorillonites. Thermochimica Acta, 2010, 510, 185-194.	1.2	31
50	Synergistic effect of carbon black and nanoclay fillers in styrene butadiene rubber matrix: Development of dual structure. Composites Part A: Applied Science and Manufacturing, 2009, 40, 309-316.	3.8	154