Pooyan Makvandi

List of Publications by Year
in descending order

133	8,179	31902 53	56606 83
papers	citations	h-index	g-index

136	136	136	6623
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Wound healing and antimicrobial effect of active secondary metabolites in chitosan-based wound dressings: A review. Carbohydrate Polymers, 2020, 233, 115839.	5.1	425
2	Metalâ€Based Nanomaterials in Biomedical Applications: Antimicrobial Activity and Cytotoxicity Aspects. Advanced Functional Materials, 2020, 30, 1910021.	7.8	404
3	Progress in Conductive Polyaniline-Based Nanocomposites for Biomedical Applications: A Review. Journal of Medicinal Chemistry, 2020, 63, 1-22.	2.9	302
4	Advances in Antimicrobial Microneedle Patches for Combating Infections. Advanced Materials, 2020, 32, e2002129.	11.1	237
5	Antibacterial quaternary ammonium compounds in dental materials: A systematic review. Dental Materials, 2018, 34, 851-867.	1.6	231
6	3D and 4D printing in dentistry and maxillofacial surgery: Printing techniques, materials, and applications. Acta Biomaterialia, 2021, 122, 26-49.	4.1	175
7	Recent progress in the industrial and biomedical applications of tragacanth gum: A review. Carbohydrate Polymers, 2019, 212, 450-467.	5.1	172
8	Regulation of Nuclear Factor-KappaB (NF-ÎºB) signaling pathway by non-coding RNAs in cancer: Inhibiting or promoting carcinogenesis?. Cancer Letters, 2021, 509, 63-80.	3.2	166
9	In vivo gene delivery mediated by non-viral vectors for cancer therapy. Journal of Controlled Release, 2020, 325, 249-275.	4.8	156
10	Engineering Microneedle Patches for Improved Penetration: Analysis, Skin Models and Factors Affecting Needle Insertion. Nano-Micro Letters, 2021, 13, 93.	14.4	151
11	Biosynthesis and characterization of antibacterial thermosensitive hydrogels based on corn silk extract, hyaluronic acid and nanosilver for potential wound healing. Carbohydrate Polymers, 2019, 223, 115023.	5.1	148
12	Polymeric and inorganic nanoscopical antimicrobial fillers in dentistry. Acta Biomaterialia, 2020, 101, 69-101.	4.1	143
13	Hyaluronic acid/corn silk extract based injectable nanocomposite: A biomimetic antibacterial scaffold for bone tissue regeneration. Materials Science and Engineering C, 2020, 107, 110195.	3.8	138
14	Self-assembled peptide and protein nanostructures for anti-cancer therapy: Targeted delivery, stimuli-responsive devices and immunotherapy. Nano Today, 2021, 38, 101119.	6.2	135
15	Stimuli-responsive transdermal microneedle patches. Materials Today, 2021, 47, 206-222.	8.3	129
16	Metal-Based Nanostructures/PLGA Nanocomposites: Antimicrobial Activity, Cytotoxicity, and Their Biomedical Applications. ACS Applied Materials & Interfaces, 2020, 12, 3279-3300.	4.0	121
17	Antimicrobial Ionic Liquidâ€Based Materials for Biomedical Applications. Advanced Functional Materials, 2021, 31, 2104148.	7.8	116
18	Functionalization of polymers and nanomaterials for water treatment, food packaging, textile and biomedical applications: a review. Environmental Chemistry Letters, 2021, 19, 583-611.	8.3	112

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19	Chitosan nanofiber biocomposites for potential wound healing applications: Antioxidant activity with synergic antibacterial effect. Bioengineering and Translational Medicine, 2022, 7, e10254.	3.9	108
20	4D-Printed Dynamic Materials in Biomedical Applications: Chemistry, Challenges, and Their Future Perspectives in the Clinical Sector. Journal of Medicinal Chemistry, 2020, 63, 8003-8024.	2.9	107
21	Biomedical application of chitosan-based nanoscale delivery systems: Potential usefulness in siRNA delivery for cancer therapy. Carbohydrate Polymers, 2021, 260, 117809.	5.1	103
22	Drug Delivery (Nano)Platforms for Oral and Dental Applications: Tissue Regeneration, Infection Control, and Cancer Management. Advanced Science, 2021, 8, 2004014.	5.6	100
23	Hyaluronic acid-based nanoplatforms for Doxorubicin: A review of stimuli-responsive carriers, co-delivery and resistance suppression. Carbohydrate Polymers, 2021, 272, 118491.	5.1	100
24	Selfâ€Assembled Carbohydrate Polymers for Food Applications: A Review. Comprehensive Reviews in Food Science and Food Safety, 2019, 18, 2009-2024.	5.9	97
25	Toxicity and remediation of pharmaceuticals and pesticides using metal oxides and carbon nanomaterials. Chemosphere, 2021, 275, 130055.	4.2	89
26	Bioactive Carboxymethyl Starch-Based Hydrogels Decorated with CuO Nanoparticles: Antioxidant and Antimicrobial Properties and Accelerated Wound Healing In Vivo. International Journal of Molecular Sciences, 2021, 22, 2531.	1.8	86
27	Versatile role of curcumin and its derivatives in lung cancer therapy. Journal of Cellular Physiology, 2020, 235, 9241-9268.	2.0	85
28	Antimicrobial gum bio-based nanocomposites and their industrial and biomedical applications. Chemical Communications, 2019, 55, 14871-14885.	2.2	84
29	Nrf2 signaling pathway in cisplatin chemotherapy: Potential involvement in organ protection and chemoresistance. Pharmacological Research, 2021, 167, 105575.	3.1	84
30	An overview on non-spherical semiconductors for heterogeneous photocatalytic degradation of organic water contaminants. Chemosphere, 2021, 280, 130907.	4.2	84
31	Advances in Antimicrobial Organic and Inorganic Nanocompounds in Biomedicine. Advanced Therapeutics, 2020, 3, 2000024.	1.6	82
32	Lung cancer cells and their sensitivity/resistance to cisplatin chemotherapy: Role of microRNAs and upstream mediators. Cellular Signalling, 2021, 78, 109871.	1.7	82
33	Performance properties and antibacterial activity of crosslinked films of quaternary ammonium modified starch and poly(vinyl alcohol). International Journal of Biological Macromolecules, 2015, 80, 596-604.	3.6	81
34	Progress in Microneedle-Mediated Protein Delivery. Journal of Clinical Medicine, 2020, 9, 542.	1.0	81
35	Mesoporous Bioactive Glasses in Cancer Diagnosis and Therapy: Stimuliâ€Responsive, Toxicity, Immunogenicity, and Clinical Translation. Advanced Science, 2022, 9, e2102678.	5.6	76
36	Antibacterial tragacanth gum-based nanocomposite films carrying ascorbic acid antioxidant for bioactive food packaging. Carbohydrate Polymers, 2020, 247, 116678.	5.1	73

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37	Advances in tannic acid-incorporated biomaterials: Infection treatment, regenerative medicine, cancer therapy, and biosensing. Chemical Engineering Journal, 2022, 432, 134146.	6.6	71
38	Synthesis and characterization of photo-curable bis-quaternary ammonium dimethacrylate with antimicrobial activity for dental restoration materials. European Polymer Journal, 2016, 74, 81-90.	2.6	69
39	Endocytosis of abiotic nanomaterials and nanobiovectors: Inhibition of membrane trafficking. Nano Today, 2021, 40, 101279.	6.2	69
40	Employing siRNA tool and its delivery platforms in suppressing cisplatin resistance: Approaching to a new era of cancer chemotherapy. Life Sciences, 2021, 277, 119430.	2.0	68
41	Progress in Natural Compounds/siRNA Co-delivery Employing Nanovehicles for Cancer Therapy. ACS Combinatorial Science, 2020, 22, 669-700.	3.8	65
42	Progress in Delivery of siRNA-Based Therapeutics Employing Nano-Vehicles for Treatment of Prostate Cancer. Bioengineering, 2020, 7, 91.	1.6	65
43	Folic Acid-Adorned Curcumin-Loaded Iron Oxide Nanoparticles for Cervical Cancer. ACS Applied Bio Materials, 2022, 5, 1305-1318.	2.3	65
44	Polychemotherapy with Curcumin and Doxorubicin via Biological Nanoplatforms: Enhancing Antitumor Activity. Pharmaceutics, 2020, 12, 1084.	2.0	64
45	Apigenin as Tumor Suppressor in Cancers: Biotherapeutic Activity, Nanodelivery, and Mechanisms With Emphasis on Pancreatic Cancer. Frontiers in Chemistry, 2020, 8, 829.	1.8	64
46	Small interfering RNA (siRNA) to target genes and molecular pathways in glioblastoma therapy: Current status with an emphasis on delivery systems. Life Sciences, 2021, 275, 119368.	2.0	63
47	Biomedical Applications of MXeneâ€Integrated Composites: Regenerative Medicine, Infection Therapy, Cancer Treatment, and Biosensing. Advanced Functional Materials, 2022, 32, .	7.8	62
48	STAT3 Pathway in Gastric Cancer: Signaling, Therapeutic Targeting and Future Prospects. Biology, 2020, 9, 126.	1.3	61
49	Photocurable, Antimicrobial Quaternary Ammoniumâ€“modified Nanosilica. Journal of Dental Research, 2015, 94, 1401-1407.	2.5	59
50	Cytotoxic aquatic pollutants and their removal by nanocomposite-based sorbents. Chemosphere, 2020, 258, 127324.	4.2	59
51	AIE-featured tetraphenylethylene nanoarchitectures in biomedical application: Bioimaging, drug delivery and disease treatment. Coordination Chemistry Reviews, 2021, 447, 214135.	9.5	59
52	Macrophage Cell Membraneâ€Cloaked Nanoplatforms for Biomedical Applications. Small Methods, 2022, 6, .	4.6	58
53	Turning Toxic Nanomaterials into a Safe and Bioactive Nanocarrier for Co-delivery of DOX/pCRISPR. ACS Applied Bio Materials, 2021, 4, 5336-5351.	2.3	57
54	Antimicrobial modified hydroxyapatite composite dental bite by stereolithography. Polymers for Advanced Technologies, 2018, 29, 364-371.	1.6	56

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55	The role of microRNA-338-3p in cancer: growth, invasion, chemoresistance, and mediators. Life Sciences, 2021, 268, 119005.	2.0	55
56	Bioinspired microneedle patches: Biomimetic designs, fabrication, and biomedical applications. Matter, 2022, 5, 390-429.	5.0	54
57	Engineered Microneedle Patches for Controlled Release of Active Compounds: Recent Advances in Release Profile Tuning. Advanced Therapeutics, 2020, 3, 2000171.	1.6	52
58	A review on advances in graphene-derivative/polysaccharide bionanocomposites: Therapeutics, pharmacogenomics and toxicity. Carbohydrate Polymers, 2020, 250, 116952.	5.1	50
59	Gallic acid for cancer therapy: Molecular mechanisms and boosting efficacy by nanoscopical delivery. Food and Chemical Toxicology, 2021, 157, 112576.	1.8	50
60	Electroconductive multi-functional polypyrrole composites for biomedical applications. Applied Materials Today, 2021, 24, 101117.	2.3	49
61	Advances in biogenically synthesized shaped metal- and carbon-based nanoarchitectures and their medicinal applications. Advances in Colloid and Interface Science, 2020, 283, 102236.	7.0	46
62	Functionalization of Polymers and Nanomaterials for Biomedical Applications: Antimicrobial Platforms and Drug Carriers. Prosthesis, 2020, 2, 117-139.	1.1	46
63	Oxygen releasing materials: Towards addressing the hypoxia-related issues in tissue engineering. Materials Science and Engineering C, 2021, 122, 111896.	3.8	46
64	(Nano)platforms in bladder cancer therapy: Challenges and opportunities. Bioengineering and Translational Medicine, 2023, 8, .	3.9	46
65	Nanotechnological Approaches in Prostate Cancer Therapy: Integration of engineering and biology. Nano Today, 2022, 45, 101532.	6.2	46
66	In vivo drug delivery applications of nanogels: a review. Nanomedicine, 2020, 15, 2707-2727.	1.7	45
67	Biofabricated Nanostructures and Their Composites in Regenerative Medicine. ACS Applied Nano Materials, 2020, 3, 6210-6238.	2.4	43
68	Ionic liquid-based antimicrobial materials for water treatment, air filtration, food packaging and anticorrosion coatings. Advances in Colloid and Interface Science, 2021, 294, 102454.	7.0	43
69	Doxorubicin-loaded graphene oxide nanocomposites in cancer medicine: stimuli-responsive carriers, co-delivery and suppressing resistance. Expert Opinion on Drug Delivery, 2022, 19, 355-382.	2.4	41
70	Electrospun fibers based on carbohydrate gum polymers and their multifaceted applications. Carbohydrate Polymers, 2020, 247, 116705.	5.1	39
71	The role of SOX family transcription factors in gastric cancer. International Journal of Biological Macromolecules, 2021, 180, 608-624.	3.6	39
72	Interplay between SOX9 transcription factor and microRNAs in cancer. International Journal of Biological Macromolecules, 2021, 183, 681-694.	3.6	39

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73	Smart Adsorbents for Aquatic Environmental Remediation. Small, 2021, 17, e2007840.	5.2	37
74	Dexamethasone: Insights into Pharmacological Aspects, Therapeutic Mechanisms, and Delivery Systems. ACS Biomaterials Science and Engineering, 2022, 8, 1763-1790.	2.6	37
75	Toward Regulatory Effects of Curcumin on Transforming Growth Factor-Beta Across Different Diseases: A Review. Frontiers in Pharmacology, 2020, 11, 585413.	1.6	35
76	Electrospun fibers based on botanical, seaweed, microbial, and animal sourced biomacromolecules and their multidimensional applications. International Journal of Biological Macromolecules, 2021, 171, 130-149.	3.6	35
77	Recent advances in bioprinting technologies for engineering cardiac tissue. Materials Science and Engineering C, 2021, 124, 112057.	3.8	35
78	Effect of silver nanoparticle on the properties of poly(methyl methacrylate) nanocomposite network made by in situ photoiniferter-mediated photopolymerization. Bulletin of Materials Science, 2015, 38, 1625-1631.	0.8	34
79	Water decontamination using bio-based, chemically functionalized, doped, and ionic liquid-enhanced adsorbents: review. Environmental Chemistry Letters, 2021, 19, 3075-3114.	8.3	34
80	pH-Responsive, Adorned Nanoniosomes for Codelivery of Cisplatin and Epirubicin: Synergistic Treatment of Breast Cancer. ACS Applied Bio Materials, 2022, 5, 675-690.	2.3	34
81	Nonspherical Metalâ€Based Nanoarchitectures: Synthesis and Impact of Size, Shape, and Composition on Their Biological Activity. Small, 2021, 17, e2007073.	5.2	33
82	Prevascularized Micro-/Nano-Sized Spheroid/Bead Aggregates for Vascular Tissue Engineering. Nano-Micro Letters, 2021, 13, 182.	14.4	33
83	Pre-clinical investigation of STAT3 pathway in bladder cancer: Paving the way for clinical translation. Biomedicine and Pharmacotherapy, 2021, 133, 111077.	2.5	31
84	Nanotechnology-Abetted Astaxanthin Formulations in Multimodel Therapeutic and Biomedical Applications. Journal of Medicinal Chemistry, 2022, 65, 2-36.	2.9	31
85	Bioactive hybrid metal-organic framework (MOF)-based nanosensors for optical detection of recombinant SARS-CoV-2 spike antigen. Science of the Total Environment, 2022, 825, 153902.	3.9	31
86	Recent advances in bioprinting technologies for engineering different cartilage-based tissues. Materials Science and Engineering C, 2021, 123, 112005.	3.8	29
87	Biodegradable antibacterial and antioxidant nanocomposite films based on dextrin for bioactive food packaging. Journal of Nanostructure in Chemistry, 2022, 12, 991-1006.	5.3	29
88	CaZnO-based nanoghosts for the detection of ssDNA, pCRISPR and recombinant SARS-CoV-2 spike antigen and targeted delivery of doxorubicin. Chemosphere, 2022, 306, 135578.	4.2	28
89	Natural Formulations Provide Antioxidant Complement to Hyaluronic Acid-Based Topical Applications Used in Wound Healing. Polymers, 2020, 12, 1847.	2.0	27
90	Nanobased Platforms for Diagnosis and Treatment of COVID-19: From Benchtop to Bedside. ACS Biomaterials Science and Engineering, 2021, 7, 2150-2176.	2.6	27

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91	Dendrimers as nanoscale vectors: Unlocking the bars of cancer therapy. Seminars in Cancer Biology, 2022, 86, 396-419.	4.3	27
92	Functionalization of Magnetic Nanoparticles by Folate as Potential MRI Contrast Agent for Breast Cancer Diagnostics. Molecules, 2020, 25, 4053.	1.7	26
93	Recent advances in bioprinting technologies for engineering hepatic tissue. Materials Science and Engineering C, 2021, 123, 112013.	3.8	26
94	Gum polysaccharide/nanometal hybrid biocomposites in cancer diagnosis and therapy. Biotechnology Advances, 2021, 48, 107711.	6.0	26
95	A perspective on the applications of functionalized nanogels: promises and challenges. International Materials Reviews, 2023, 68, 1-25.	9.4	25
96	Polymer conjugation optimizes EDTA as a calcium-chelating agent that exclusively removes extrafibrillar minerals from mineralized collagen. Acta Biomaterialia, 2019, 90, 424-440.	4.1	24
97	Lawsone-encapsulated chitosan/polyethylene oxide nanofibrous mat as a potential antibacterial biobased wound dressing. Engineered Regeneration, 2021, 2, 219-226.	3.0	24
98	Strontium doped bioglass incorporated hydrogel-based scaffold for amplified bone tissue regeneration. Scientific Reports, 2022, 12, .	1.6	24
99	Photoactive polymers-decorated Cu-Al layered double hydroxide hexagonal architectures: A potential non-viral vector for photothermal therapy and co-delivery of DOX/pCRISPR. Chemical Engineering Journal, 2022, 448, 137747.	6.6	24
100	Recent advances in chemically defined and tunable hydrogel platforms for organoid culture. Bio-Design and Manufacturing, 2021, 4, 641-674.	3.9	22
101	The Molecular Basis of COVID-19 Pathogenesis, Conventional and Nanomedicine Therapy. International Journal of Molecular Sciences, 2021, 22, 5438.	1.8	22
102	A reduced graphene oxide-Î²-cyclodextrin nanocomposite-based electrode for electrochemical detection of curcumin. RSC Advances, 2021, 11, 7862-7872.	1.7	22
103	The Optimized Formulation of Tamoxifen-Loaded Niosomes Efficiently Induced Apoptosis and Cell Cycle Arrest in Breast Cancer Cells. AAPS PharmSciTech, 2022, 23, 57.	1.5	20
104	Electroconductive and photoactive poly(phenylenediamine)s with antioxidant and antimicrobial activities for potential photothermal therapy. New Journal of Chemistry, 2022, 46, 6255-6266.	1.4	19
105	Fabrication of a Greener TiO₂@Gum Arabic-Carbon Paste Electrode for the Electrochemical Detection of Pb²⁺ Ions in Plastic Toys. ACS Omega, 2020, 5, 25390-25399.	1.6	18
106	Synthesis of green benzamide-decorated UiO-66-NH2 for biomedical applications. Chemosphere, 2022, 299, 134359.	4.2	18
107	Chitosan/alginate bionanocomposites adorned with mesoporous silica nanoparticles for bone tissue engineering. Journal of Nanostructure in Chemistry, 2023, 13, 389-403.	5.3	17
108	Non-spherical nanostructures in nanomedicine: From noble metal nanorods to transition metal dichalcogenide nanosheets. Applied Materials Today, 2021, 24, 101107.	2.3	16

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109	Advances in Hyaluronicâ€Acidâ€Based (Nano)Devices for Cancer Therapy. Macromolecular Bioscience, 2022, 22, e2100304.	2.1	16
110	Paper-Based Cell Culture: Paving the Pathway for Liver Tissue Model Development on a Cellulose Paper Chip. ACS Applied Bio Materials, 2020, 3, 3956-3974.	2.3	15
111	Advances in Bio-Based Polymers for Colorectal Cancer Treatment: Hydrogels and Nanoplatforms. Gels, 2021, 7, 6.	2.1	15
112	Multifunctional green synthesized Cuâ€“Al layered double hydroxide (LDH) nanoparticles: anti-cancer and antibacterial activities. Scientific Reports, 2022, 12, .	1.6	15
113	Injectable hyaluronic acid-based antibacterial hydrogel adorned with biogenically synthesized AgNPs-decorated multi-walled carbon nanotubes. Progress in Biomaterials, 2021, 10, 77-89.	1.8	14
114	Ionic liquid-mediated synthesis of metal nanostructures: Potential application in cancer diagnosis and therapy. Journal of Ionic Liquids, 2022, 2, 100033.	1.0	14
115	<scp>miRNA</scp>â€encapsulated abiotic materials and biovectors for cutaneous and oral wound healing: Biogenesis, mechanisms, and delivery nanocarriers. Bioengineering and Translational Medicine, 2023, 8, .	3.9	13
116	Multifunctional Tetracycline-Loaded Silica-Coated Coreâ€“Shell Magnetic Nanoparticles: Antibacterial, Antibiofilm, and Cytotoxic Activities. ACS Applied Bio Materials, 2022, 5, 1731-1743.	2.3	11
117	A Hyaluronic Acid-Based Formulation with Simultaneous Local Drug Delivery and Antioxidant Ability for Active Viscosupplementation. ACS Omega, 2022, 7, 10039-10048.	1.6	10
118	Engineering biomimetic intestinal topological features in 3D tissue models: retrospects and prospects. Bio-Design and Manufacturing, 2021, 4, 568-595.	3.9	9
119	Magnetic Sulfonated Melamine-Formaldehyde Resin as an Efficient Catalyst for the Synthesis of Antioxidant and Antimicrobial Pyrazolone Derivatives. Catalysts, 2022, 12, 626.	1.6	8
120	Nanoparticles and nanofibres based on tree gums: Biosynthesis and applications. Comprehensive Analytical Chemistry, 2021, 94, 223-265.	0.7	6
121	Co-Delivery of Nano-Silver and Vancomycin via Silica Nanopollens for Enhanced Antibacterial Functions. Antibiotics, 2022, 11, 685.	1.5	6
122	Antimicrobial Metal-Based Nanomaterials and Their Industrial and Biomedical Applications. Materials Horizons, 2020, , 123-134.	0.3	4
123	The association of clinicopathological characterizations of colorectal cancer with membrane-bound mucins genes and LncRNAs. Pathology Research and Practice, 2022, 233, 153883.	1.0	4
124	Conference Accreditation and Need of a Bibliometric Measure to Distinguish Predatory Conferences. Publications, 2021, 9, 16.	1.9	3
125	In response to â€œComment on â€œRegulation of Nuclear Factor-KappaB (NF-Î²B) signaling pathway by non-coding RNAs in cancer: Inhibiting or promoting carcinogenesis?â€• Cancer Lett. 2021 May 2; 509 (2021) 63â€“80â€• Cancer Letters, 2021, 516, 36-37.	3.2	3
126	A progressive review on paper-based bacterial colorimetric detection and antimicrobial susceptibility testing. , 2021, , 687-718.		2

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127	Detection of Dopamine Receptors Using Nanoscale Dendrimer for Potential Application in Targeted Delivery and Whole-Body Imaging: Synthesis and In Vivo Organ Distribution. ACS Applied Bio Materials, 2022, 5, 1744-1755.	2.3	2
128	Biomacromolecule-mediated pulmonary delivery of siRNA and anti-sense oligos: challenges and possible solutions. Expert Reviews in Molecular Medicine, 2021, 23, e22.	1.6	1
129	Micro and Nano Sensors from Additive Manufacturing. Journal of Nanomaterials, 2022, 2022, 1-2.	1.5	1
130	Gelatinâ€“chitosan macroporous scaffolds integrated with customizable hollow channels for liver tissue engineering. , 2021, , 667-685.		0
131	Polymeric and Nanoscopical Antimicrobial Fillers in Dentistry. SSRN Electronic Journal, 0, , .	0.4	0
132	Surface Reactive and Active Polymers. , 2020, , 35-54.		0
133	Nanoâ€biomedicine: Role of nanomaterials in the biomedical sector. Clinical and Translational Discovery, 2022, 2, .	0.2	0