Aydin Berenjian

List of Publications by Year in descending order

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134 papers	5,271 citations	35 h-index	98622 67 g-index
135	135	135	5741 citing authors
all docs	docs citations	times ranked	

#	Article	IF	CITATIONS
1	Prebiotics: Definition, Types, Sources, Mechanisms, and Clinical Applications. Foods, 2019, 8, 92.	1.9	715
2	Application of magnetic nanoparticles in smart enzyme immobilization. Biotechnology Letters, 2016, 38, 223-233.	1.1	288
3	Bioconcrete: next generation of self-healing concrete. Applied Microbiology and Biotechnology, 2016, 100, 2591-2602.	1.7	270
4	Synthesis and Application of Amine Functionalized Iron Oxide Nanoparticles on Menaquinone-7 Fermentation: A Step towards Process Intensification. Nanomaterials, 2016, 6, 1.	1.9	219
5	Chitosan magnetic nanoparticles for drug delivery systems. Critical Reviews in Biotechnology, 2017, 37, 492-509.	5.1	132
6	Microbially induced calcium carbonate precipitation: a widespread phenomenon in the biological world. Applied Microbiology and Biotechnology, 2019, 103, 4693-4708.	1.7	129
7	Iron oxide nanoparticles in modern microbiology and biotechnology. Critical Reviews in Microbiology, 2017, 43, 493-507.	2.7	118
8	Plant-Mediated Synthesis and Applications of Iron Nanoparticles. Molecular Biotechnology, 2018, 60, 154-168.	1.3	116
9	Application of Chitosan-Based Nanocarriers in Tumor-Targeted Drug Delivery. Molecular Biotechnology, 2015, 57, 201-218.	1.3	114
10	Nattokinase: production and application. Applied Microbiology and Biotechnology, 2014, 98, 9199-9206.	1.7	94
11	Green synthesized nanoclusters of ultra-small zero valent iron nanoparticles as a novel dye removing material. Science of the Total Environment, 2018, 621, 1527-1532.	3.9	92
12	Biomimetic synthesis of silver nanoparticles using microalgal secretory carbohydrates as a novel anticancer and antimicrobial. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2016, 7, 015018.	0.7	90
13	Efficient media for high menaquinone-7 production: response surface methodology approach. New Biotechnology, 2011, 28, 665-672.	2.4	87
14	Recent advances in application of chitosan in fuel cells. Sustainable Chemical Processes, 2013, 1 , .	2.3	85
15	Recycling of waste glass as aggregate in cement-based materials. Environmental Science and Ecotechnology, 2020, 4, 100064.	6.7	85
16	A biotechnological perspective on the application of iron oxide nanoparticles. Nano Research, 2016, 9, 2203-2225.	5.8	82
17	Induced calcium carbonate precipitation using Bacillus species. Applied Microbiology and Biotechnology, 2016, 100, 9895-9906.	1.7	80
18	Magnetic immobilization of Bacillus subtilis natto cells for menaquinone-7 fermentation. Applied Microbiology and Biotechnology, 2016, 100, 173-180.	1.7	80

#	Article	lF	CITATIONS
19	New insights into the role of pH and aeration in the bacterial production of calcium carbonate (CaCO3). Applied Microbiology and Biotechnology, 2017, 101, 3131-3142.	1.7	74
20	Mechanical properties of bio self-healing concrete containing immobilized bacteria with iron oxide nanoparticles. Applied Microbiology and Biotechnology, 2018, 102, 4489-4498.	1.7	69
21	Application of microbially induced calcium carbonate precipitation in designing bio self-healing concrete. World Journal of Microbiology and Biotechnology, 2018, 34, 168.	1.7	68
22	Circular Economy of Construction and Demolition Waste: A Literature Review on Lessons, Challenges, and Benefits. Materials, 2022, 15, 76.	1.3	67
23	Designing of an Intensification Process for Biosynthesis and Recovery of Menaquinone-7. Applied Biochemistry and Biotechnology, 2014, 172, 1347-1357.	1.4	64
24	Green synthesis and characterization of zero-valent iron nanoparticles using stinging nettle (<i>Urtica dioica</i>) leaf extract. Green Processing and Synthesis, 2017, 6, 469-475.	1.3	64
25	Vitamin K series: current status and future prospects. Critical Reviews in Biotechnology, 2015, 35, 199-208.	5.1	63
26	Bio-reinforcedÂself-healing concrete using magnetic iron oxide nanoparticles. Applied Microbiology and Biotechnology, 2018, 102, 2167-2178.	1.7	61
27	Mechanical properties and durability performance of fly ash based mortar containing nano- and micro-silica additives. Construction and Building Materials, 2020, 252, 119121.	3.2	60
28	The effect of iron oxide nanoparticles on Bacillus subtilis biofilm, growth and viability. Process Biochemistry, 2017, 62, 231-240.	1.8	59
29	Green and Economic Fabrication of Zinc Oxide (ZnO) Nanorods as a Broadband UV Blocker and Antimicrobial Agent. Nanomaterials, 2020, 10, 530.	1.9	59
30	Amine-modified magnetic iron oxide nanoparticle as a promising carrier for application in bio self-healing concrete. Applied Microbiology and Biotechnology, 2018, 102, 175-184.	1.7	55
31	Production and application of menaquinone-7 (vitamin K2): a new perspective. World Journal of Microbiology and Biotechnology, 2017, 33, 2.	1.7	51
32	Identification of Bacillus Probiotics Isolated from Soil Rhizosphere Using 16S rRNA, recA, rpoB Gene Sequencing and RAPD-PCR. Probiotics and Antimicrobial Proteins, 2016, 8, 8-18.	1.9	44
33	Effect of Biofilm Formation by Bacillus subtilis natto on Menaquinone-7 Biosynthesis. Molecular Biotechnology, 2013, 54, 371-378.	1.3	43
34	Optimization of Bacillus subtilis natto growth parameters in glycerol-based medium for vitamin K (Menaquinone-7) production in biofilm reactors. Bioprocess and Biosystems Engineering, 2018, 41, 195-204.	1.7	42
35	Magnetic immobilization of bacteria using iron oxide nanoparticles. Biotechnology Letters, 2018, 40, 237-248.	1.1	40
36	Implementation of fed-batch strategies for vitamin K (menaquinone-7) production by Bacillus subtilis natto in biofilm reactors. Applied Microbiology and Biotechnology, 2018, 102, 9147-9157.	1.7	36

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37	Enhanced Production of Menaquinone 7 via Solid Substrate Fermentation from Bacillus subtilis. International Journal of Food Engineering, 2011, 7, .	0.7	35
38	The Effect of Cell Immobilization by Calcium Alginate on Bacterially Induced Calcium Carbonate Precipitation. Fermentation, 2017, 3, 57.	1.4	35
39	Biofilm reactors as a promising method for vitamin K (menaquinone-7) production. Applied Microbiology and Biotechnology, 2019, 103, 5583-5592.	1.7	35
40	Green synthesis and characterization of silver nanoparticles using Alcea rosea flower extract as a new generation of antimicrobials. Chemical Industry and Chemical Engineering Quarterly, 2017, 23, 31-37.	0.4	35
41	Extracellular Production of Recombinant l-Asparaginase II in Escherichia coli: Medium Optimization Using Response Surface Methodology. International Journal of Peptide Research and Therapeutics, 2015, 21, 487-495.	0.9	34
42	Strain and plastic composite support (PCS) selection for vitamin K (Menaquinone-7) production in biofilm reactors. Bioprocess and Biosystems Engineering, 2017, 40, 1507-1517.	1.7	34
43	A Review on the Utilization of Lignin as a Fermentation Substrate to Produce Lignin-Modifying Enzymes and Other Value-Added Products. Molecules, 2021, 26, 2960.	1.7	34
44	The role of magnetic iron oxide nanoparticles in the bacterially induced calcium carbonate precipitation. Applied Microbiology and Biotechnology, 2018, 102, 3595-3606.	1.7	33
45	Use of virtual learning to increase key laboratory skills and essential non-cognitive characteristics. Education for Chemical Engineers, 2020, 33, 66-75.	2.8	33
46	Facile fabrication of uniform hollow silica microspheres using a novel biological template. Colloids and Surfaces B: Biointerfaces, 2014, 118, 249-253.	2.5	31
47	Controlled synthesis of iron oxyhydroxide (FeOOH) nanoparticles using secretory compounds from <i>Chlorella vulgaris</i> microalgae. Bioengineered, 2019, 10, 390-396.	1.4	31
48	Effects of medium components in a glycerol-based medium on vitamin K (menaquinone-7) production by Bacillus subtilis natto in biofilm reactors. Bioprocess and Biosystems Engineering, 2019, 42, 223-232.	1.7	31
49	Optimization of reaction parameters for the green synthesis of zero valent iron nanoparticles using pine tree needles. Green Processing and Synthesis, 2019, 8, 846-855.	1.3	29
50	Impact of magnetic immobilization on the cell physiology of green unicellular algae <i>Chlorella vulgaris</i> . Bioengineered, 2020, 11, 141-153.	1.4	29
51	One-put green synthesis of multifunctional silver iron core-shell nanostructure with antimicrobial and catalytic properties. Industrial Crops and Products, 2019, 130, 230-236.	2.5	27
52	Influence of Small RNAs on Biofilm Formation Process in Bacteria. Molecular Biotechnology, 2013, 55, 288-297.	1.3	26
53	Cloning, Expression, and Purification of a Synthetic Human Growth Hormone in Escherichia coli Using Response Surface Methodology. Molecular Biotechnology, 2015, 57, 241-250.	1.3	26
54	Microbial calcium carbonate precipitation with high affinity to fill the concrete pore space: nanobiotechnological approach. Bioprocess and Biosystems Engineering, 2019, 42, 37-46.	1.7	26

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55	Enhanced Vitamin K (Menaquinone-7) Production by Bacillus subtilis natto in Biofilm Reactors by Optimization of Glucose-based Medium. Current Pharmaceutical Biotechnology, 2018, 19, 917-924.	0.9	26
56	Utilization of glucose-based medium and optimization of Bacillus subtilis natto growth parameters for vitamin K (menaquinone-7) production in biofilm reactors. Biocatalysis and Agricultural Biotechnology, 2018, 13, 219-224.	1.5	25
57	Modeling of vitamin K (Menaquinoe-7) fermentation by Bacillus subtilis natto in biofilm reactors. Biocatalysis and Agricultural Biotechnology, 2019, 17, 196-202.	1.5	25
58	A novel approach to accelerate bacterially induced calcium carbonate precipitation using oxygen releasing compounds (ORCs). Biocatalysis and Agricultural Biotechnology, 2017, 12, 299-307.	1.5	24
59	Process Intensification for Production and Recovery of Biological Products. American Journal of Biochemistry and Biotechnology, 2015, 11, 37-43.	0.1	23
60	Conversion of Mutton Fat to Cocoa Butter Equivalent by Increasing the Unsaturated Fatty Acids at the Sn-2 Position of Triacylglycerol Through Fermentation by <i>Yarrowia Lipolytica</i> Journal of Biochemistry and Biotechnology, 2015, 11, 57-65.	0.1	23
61	The effect of virtual field trip as an introductory tool for an engineering real field trip. Education for Chemical Engineers, 2019, 27, 6-11.	2.8	23
62	Impact of 3–Aminopropyltriethoxysilane-Coated Iron Oxide Nanoparticles on Menaquinone-7 Production Using B. subtilis. Nanomaterials, 2017, 7, 350.	1.9	22
63	The effect of rare codons following the ATG start codon on expression of human granulocyte-colony stimulating factor in Escherichia coli. Protein Expression and Purification, 2015, 114, 108-114.	0.6	21
64	Mesoporous carboxylated Mn 2 O 3 nanofibers: Synthesis, characterization and dye removal property. Journal of the Taiwan Institute of Chemical Engineers, 2018, 86, 57-72.	2.7	21
65	The Effect of Real and Virtual Construction Field Trips on Students' Perception and Career Aspiration. Sustainability, 2020, 12, 1200.	1.6	21
66	Microwave-Assisted Green Synthesis of Silver Nanoparticles Using Juglans regia Leaf Extract and Evaluation of Their Physico-Chemical and Antibacterial Properties. Antibiotics, 2018, 7, 68.	1.5	20
67	Developing three-component ginger-cinnamon-cardamom composite essential oil nanoemulsion as natural food preservatives. Environmental Research, 2022, 204, 112133.	3.7	20
68	Size Tuned Synthesis of FeOOH Nanorods toward Self-Assembled Nanoarchitectonics. Langmuir, 2021, 37, 115-123.	1.6	19
69	Cis and trans isomers of the vitamin menaquinone-7: which one is biologically significant?. Applied Microbiology and Biotechnology, 2020, 104, 2765-2776.	1.7	19
70	Green Synthesis of Silver Nanoparticles Capped with Natural Carbohydrates Using Ephedra intermedia. Nanoscience and Nanotechnology - Asia, 2017, 7, 104-112.	0.3	19
71	Xanthan Gum Capped ZnO Microstars as a Promising Dietary Zinc Supplementation. Foods, 2019, 8, 88.	1.9	18
72	Microbially induced calcium carbonate precipitation to design a new type of bio self-healing dental composite. Applied Microbiology and Biotechnology, 2020, 104, 2029-2037.	1.7	18

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73	Modeling Menaquinone 7 production in tray type solid state fermenter. ANZIAM Journal, 0, 53, 354.	0.0	17
74	Biosynthesis of xanthangumâ€coated INPs by using <i>Xanthomonas campestris</i> i>. IET Nanobiotechnology, 2018, 12, 254-258.	1.9	16
75	Nanobiotechnology in Food: Concepts, Applications and Perspectives. , 2019, , .		16
76	New Perspectives on Iron-Based Nanostructures. Processes, 2020, 8, 1128.	1.3	15
77	Arginine Deiminase: Current Understanding and Applications. Recent Patents on Biotechnology, 2019, 13, 124-136.	0.4	15
78	Synthesis And Characterization Of Silver Nanoparticles With Natural Carbohydrate Capping Using Zataria Multiflora. Advanced Materials Letters, 2016, 7, 939-944.	0.3	14
79	Nattokinase production: Medium components and feeding strategy studies. Chemical Industry and Chemical Engineering Quarterly, 2014, 20, 541-547.	0.4	13
80	Template free synthesis of natural carbohydrates functionalised fluorescent silver nanoclusters. IET Nanobiotechnology, 2016, 10, 120-123.	1.9	13
81	Structural characterization of polysaccharideâ€coated iron oxide nanoparticles produced by ⟨i>Staphylococcus warneri⟨/i>, isolated from a thermal spring. Journal of Basic Microbiology, 2019, 59, 569-578.	1.8	13
82	In silico Analysis of Several Signal Peptides for the Excretory Production of Reteplase in Escherichia coli. Current Proteomics, $2017, 14, \ldots$	0.1	13
83	CHITOSAN NANOPARTICLES AND THEIR APPLICATIONS IN DRUG DELIVERY: A REVIEW. Current Research in Drug Discovery, 2014, 1, 17-25.	0.4	12
84	Enterobacter sp. Mediated Synthesis of Biocompatible Nanostructured Iron-Polysaccharide Complexes: a Nutritional Supplement for Iron-Deficiency Anemia. Biological Trace Element Research, 2020, 198, 744-755.	1.9	12
85	Magnetic Immobilization of Pichia pastoris Cells for the Production of Recombinant Human Serum Albumin. Nanomaterials, 2020, 10, 111.	1.9	12
86	Nano Iron Oxide-PCL Composite as an Improved Soft Tissue Scaffold. Processes, 2021, 9, 1559.	1.3	12
87	Medium Optimization for Recombinant Soluble Arginine Deiminase Expression in Escherichia coli Using Response Surface Methodology. Current Pharmaceutical Biotechnology, 2018, 18, 935-941.	0.9	12
88	Biotechnological Approaches for Production of High Value Compounds from Bread Waste. American Journal of Biochemistry and Biotechnology, 2016, 12, 102-109.	0.1	11
89	Hydrothermally extraction of saponin from Acanthophyllum glandulosum root – Physico-chemical characteristics and antibacterial activity evaluation. Biotechnology Reports (Amsterdam,) Tj ETQq1 1 0.784314	rgB I. ‡Over	locks 10 Tf 50
90	How menaquinone-7 deficiency influences mortality and morbidity among COVID-19 patients. Biocatalysis and Agricultural Biotechnology, 2020, 29, 101792.	1.5	10

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91	Development of an Innovative Urease-Aided Self-Healing Dental Composite. Catalysts, 2020, 10, 84.	1.6	10
92	Determination of Menaquinone-7 by a Simplified Reversed Phase- HPLC Method. Current Pharmaceutical Biotechnology, 2018, 19, 664-673.	0.9	10
93	Response surface methodology and reaction optimization to product zero-valent iron nanoparticles for organic pollutant remediation. Biocatalysis and Agricultural Biotechnology, 2019, 21, 101329.	1.5	9
94	Immobilization of Cells by Magnetic Nanoparticles. Methods in Molecular Biology, 2020, 2100, 427-435.	0.4	9
95	Synthesis of mesoporous antimicrobial herbal nanomaterial-carrier for silver nanoparticles and antimicrobial sensing. Food and Chemical Toxicology, 2022, 165, 113077.	1.8	9
96	Multifaceted toxin profile of Bacillus probiotic in newly isolated Bacillus spp. from soil rhizosphere. Biologia (Poland), 2020, 75, 309-315.	0.8	8
97	The effect of aeration and mixing in developing a dairy-based functional food rich in menaquinone-7. Bioprocess and Biosystems Engineering, 2020, 43, 1773-1780.	1.7	8
98	Isolation and identification of novel l-Methioninase producing bacteria and optimization of its production by experimental design method. Biocatalysis and Agricultural Biotechnology, 2020, 26, 101566.	1.5	7
99	Probiotics/Prebiotics in Viral Respiratory Infections: Implication for Emerging Pathogens. Recent Patents on Biotechnology, 2021, 15, 112-136.	0.4	7
100	Extracellular Production of a Potent and Chemically Resistant Nattokinase in Immobilized Escherichia coli Using Response Surface Methodology. Current Pharmaceutical Biotechnology, 2018, 19, 856-868.	0.9	7
101	Impacts of Magnetic Immobilization on the Growth and Metabolic Status of Recombinant Pichia pastoris. Molecular Biotechnology, 2022, 64, 320-329.	1.3	7
102	Magnetic immobilisation as a promising approach against bacteriophage infection. Materials Research Express, 2019, 6, 1250a8.	0.8	6
103	Development of a Menaquinone-7 enriched product through the solid-state fermentation of Bacillus licheniformis. Biocatalysis and Agricultural Biotechnology, 2019, 19, 101172.	1.5	6
104	A Comparative Study on the Influence of Nano and Micro Particles on the Workability and Mechanical Properties of Mortar Supplemented with Fly Ash. Buildings, 2021, 11, 60.	1.4	6
105	Application of magnetic immboilization for ethanol biosynthesis using Saccharomyces cerevisiae. Separation Science and Technology, 0, , 1-11.	1.3	6
106	Novel functional fermented dairy product rich in menaquinone-7. Biocatalysis and Agricultural Biotechnology, 2016, 7, 31-35.	1.5	5
107	Hairy Root Culture: A Biotechnological Approach to Produce Valuable Metabolites. , 2017, , 131-160.		5
108	Impacts of Magnetic Immobilization on the Recombinant Proteins Structure Produced in Pichia pastoris System. Molecular Biotechnology, 2021, 63, 80-89.	1.3	5

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109	Coenzyme Q10 and its Effective Sources. American Journal of Biochemistry and Biotechnology, 2016, 12, 214-219.	0.1	4
110	Evaluation of vitamin K (menaquinone-7) stability and secretion in glucose and glycerol-based media by Bacillus subtilis natto. Acta Alimentaria, 2019, 48, 405-414.	0.3	4
111	Effect of nano and micro iron oxide particles on the workability, strength and absorption rate of cement mortar containing fly ash. European Journal of Environmental and Civil Engineering, 2022, 26, 3898-3912.	1.0	4
112	Hygro-Thermo-Mechanical Responses of Balsa Wood Core Sandwich Composite Beam Exposed to Fire. Processes, 2020, 8, 103.	1.3	4
113	The effect of iron oxide nanoparticles on Lactobacillus acidophilus growth at pH 4. Bioprocess and Biosystems Engineering, 2021, 44, 39-45.	1.7	4
114	Effect of undergraduate research on students' learning and engagement. International Journal of Mechanical Engineering Education, 2022, 50, 326-348.	0.6	4
115	Potential application of Aspergillus terreus, as a biofactory, in extracellular fabrication of silver nanoparticles. Fuel, 2022, 308, 122007.	3.4	4
116	A Study of l-Lysine-Stabilized Iron Oxide Nanoparticles (IONPs) on Microalgae Biofilm Formation of Chlorella vulgaris. Molecular Biotechnology, 2022, 64, 702-710.	1.3	4
117	Whole cell immobilization of recombinant <i>E. coli</i> cells by calcium alginate beads; evaluation of plasmid stability and production of extracellular L-asparaginase. Separation Science and Technology, 2022, 57, 2836-2842.	1.3	3
118	Application of FeOOH Nano-Ellipsoids as a Novel Nano-Based Iron Supplement: an In Vivo Study. Biological Trace Element Research, 2022, 200, 2174-2182.	1.9	3
119	High Level of Menaquinone-7 Production by Milking Menaquinone-7 with Biocompatible Organic Solvents. Current Pharmaceutical Biotechnology, 2018, 19, 232-239.	0.9	3
120	Effects of Thermosonication, Sonication and Mild Heating on Organoleptic Attributes of Three Red Fruit Juices. Current Nutrition and Food Science, 2020, 16, 1299-1308.	0.3	3
121	The Role of Blended Learning on Student Performance in Biotechnology Course. American Journal of Biochemistry and Biotechnology, 2017, 13, 111-113.	0.1	2
122	A functional dairy product rich in Menaquinone-7 and FeOOH nanoparticles. LWT - Food Science and Technology, 2020, 129, 109564.	2.5	2
123	Role of Bacillus Genus in the Production of Value-Added Compounds. , 2016, , 1-33.		1
124	<i>Vitamin K2 (Menaquinone-7) production by Bacillus subtilis natto by using a glucose-based medium in biofilm reactors</i> ., 2018,,.		1
125	Future Prospects of Nanobiotechnology. , 2019, , 153-155.		1
126	Challenges for Nanobiotechnology. , 2019, , 19-25.		1

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127	Bio self-healing nanoconcretes. , 2020, , 547-558.		1
128	Intensification of Functional Foods Production. RSC Green Chemistry, 2018, , 365-380.	0.0	1
129	Use of Design of Experiments and Manuscripts Rejection Rate. American Journal of Biochemistry and Biotechnology, 2015, 11, 44-44.	0.1	O
130	Response Surface Optimized Ultrasonic Assisted Extraction of Total Flavonoids from Walnut Leaves and In Vitro Antibacterial Activities. American Journal of Biochemistry and Biotechnology, 2017, 13, 176-188.	0.1	0
131	Nanobiotechnology at a Glance. , 2019, , 1-17.		0
132	Novel Technologies in Food Nanobiotechnology. , 2019, , 27-40.		0
133	Agar microdilution procedure: A promising technique for antimicrobial susceptibility test of colloidally unstable nanostructures. Nanoscience and Nanotechnology - Asia, 2022, 12, .	0.3	0
134	Special Issue on "New Processes: Working towards a Sustainable Society― Processes, 2022, 10, 869.	1.3	0