Talat Baran

List of Publications by Year
in descending order

111 papers	4,739 citations	53660 45 h-index	114278 63 g-index
111 all docs	111 docs citations	111 times ranked	3510 citing authors

#	Article	IF	Citations
1	On chemistry of Î³-chitin. Carbohydrate Polymers, 2017, 176, 177-186.	5.1	225
2	Extraction and Characterization of Î±-Chitin and Chitosan from Six Different Aquatic Invertebrates. Food Biophysics, 2014, 9, 145-157.	1.4	131
3	Physicochemical comparison of chitin and chitosan obtained from larvae and adult Colorado potato beetle (Leptinotarsa decemlineata). Materials Science and Engineering C, 2014, 45, 72-81.	3.8	127
4	Extraction and characterization of chitin and chitosan with antimicrobial and antioxidant activities from cosmopolitan Orthoptera species (Insecta). Biotechnology and Bioprocess Engineering, 2015, 20, 168-179.	1.4	115
5	Synthesis and characterization of water soluble O-carboxymethyl chitosan Schiff bases and Cu(II) complexes. International Journal of Biological Macromolecules, 2015, 72, 94-103.	3.6	113
6	Facile synthesis of palladium nanoparticles immobilized on magnetic biodegradable microcapsules used as effective and recyclable catalyst in Suzuki-Miyaura reaction and p-nitrophenol reduction. Carbohydrate Polymers, 2019, 222, 115029.	5.1	113
7	Carboxymethyl chitosan Schiff base supported heterogeneous palladium(II) catalysts for Suzuki cross-coupling reaction. Journal of Molecular Catalysis A, 2015, 407, 47-52.	4.8	111
8	Hibiscus Rosasinensis L. aqueous extract-assisted valorization of lignin: Preparation of magnetically reusable Pd NPs@Fe3O4-lignin for Cr(VI) reduction and Suzuki-Miyaura reaction in eco-friendly media. International Journal of Biological Macromolecules, 2020, 148, 265-275.	3.6	106
9	Production of novel palladium nanocatalyst stabilized with sustainable chitosan/cellulose composite and its catalytic performance in Suzuki-Miyaura coupling reactions. Carbohydrate Polymers, 2018, 181, 596-604.	5.1	100
10	Comparison of chitin structures isolated from seven Orthoptera species. International Journal of Biological Macromolecules, 2015, 72, 797-805.	3.6	98
11	Differentiations of Chitin Content and Surface Morphologies of Chitins Extracted from Male and Female Grasshopper Species. PLoS ONE, 2015, 10, e0115531.	1.1	87
12	New chitin, chitosan, and O-carboxymethyl chitosan sources from resting eggs of Daphnia longispina (Crustacea); with physicochemical characterization, and antimicrobial and antioxidant activities. Biotechnology and Bioprocess Engineering, 2014, 19, 58-69.	1.4	83
13	Pd nanocatalyst stabilized on amine-modified zeolite: Antibacterial and catalytic activities for environmental pollution remediation in aqueous medium. Separation and Purification Technology, 2020, 239, 116542.	3.9	81
14	Cu(II) and Pd(II) complexes of water soluble O-carboxymethyl chitosan Schiff bases: Synthesis, characterization. International Journal of Biological Macromolecules, 2015, 79, 542-554.	3.6	78
15	Environmental remediation by chitosan-carbon nanotube supported palladium nanoparticles: Conversion of toxic nitroarenes into aromatic amines, degradation of dye pollutants and green synthesis of biaryls. Separation and Purification Technology, 2020, 247, 116987.	3.9	78
16	Preparation and characterisation of biodegradable pollenâ€"chitosan microcapsules and its application in heavy metal removal. Bioresource Technology, 2015, 177, 1-7.	4.8	76
17	Pd(0) nanocatalyst stabilized on a novel agar/pectin composite and its catalytic activity in the synthesis of biphenyl compounds by Suzuki-Miyaura cross coupling reaction and reduction of o-nitroaniline. Carbohydrate Polymers, 2018, 195, 45-52.	5.1	76
18	Palladium nanoparticles stabilized on a novel Schiff base modified Unye bentonite: Highly stable, reusable and efficient nanocatalyst for treating wastewater contaminants and inactivating pathogenic microbes. Separation and Purification Technology, 2020, 237, 116383.	3.9	76

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19	Practical, economical, and eco-friendly starch-supported palladium catalyst for Suzuki coupling reactions. Journal of Colloid and Interface Science, 2017, 496, 446-455.	5.0	74
20	Synthesis, characterization, and catalytic activity in Suzuki coupling and catalase-like reactions of new chitosan supported Pd catalyst. Carbohydrate Polymers, 2016, 145, 20-29.	5.1	73
21	Fabrication and application of cellulose Schiff base supported Pd(II) catalyst for fast and simple synthesis of biaryls via Suzuki coupling reaction. Applied Catalysis A: General, 2017, 531, 36-44.	2.2	68
22	An easily recoverable and highly reproducible agar-supported palladium catalyst for Suzuki-Miyaura coupling reactions and reduction of o-nitroaniline. International Journal of Biological Macromolecules, 2018, 115, 249-256.	3.6	68
23	Comparison of physicochemical properties of chitins isolated from an insect (Melolontha) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	0.4	66
24	Description of a new surface morphology for chitin extracted from wings of cockroach (Periplaneta) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.6	66
25	A new chitosan Schiff base supported Pd(II) complex for microwave-assisted synthesis of biaryls compounds. Journal of Molecular Structure, 2017, 1141, 535-541.	1.8	66
26	Sustainable chitosan/starch composite material for stabilization of palladium nanoparticles: Synthesis, characterization and investigation of catalytic behaviour of Pd@chitosan/starch nanocomposite in Suzukiâ€“Miyaura reaction. Applied Organometallic Chemistry, 2018, 32, e4075.	1.7	65
27	Biosynthesis of Highly Retrievable Magnetic Palladium Nanoparticles Stabilized on Bio-composite for Production of Various Biaryl Compounds and Catalytic Reduction of 4-Nitrophenol. Catalysis Letters, 2019, 149, 1721-1729.	1.4	65
28	A physicochemical characterization of fully acetylated chitin structure isolated from two spider species: With new surface morphology. International Journal of Biological Macromolecules, 2014, 65, 553-558.	3.6	64
29	A new method for fast chitin extraction from shells of crab, crayfish and shrimp. Natural Product Research, 2015, 29, 1477-1480.	1.0	64
30	Green heterogeneous Pd(II) catalyst produced from chitosan-cellulose micro beads for green synthesis of biaryls. Carbohydrate Polymers, 2016, 152, 181-188.	5.1	62
31	Design and application of sporopollenin microcapsule supported palladium catalyst: Remarkably high turnover frequency and reusability in catalysis of biaryls. Journal of Colloid and Interface Science, 2017, 486, 194-203.	5.0	62
32	Ultrasound-accelerated synthesis of biphenyl compounds using novel Pd(0) nanoparticles immobilized on bio-composite. Ultrasonics Sonochemistry, 2018, 45, 231-237.	3.8	61
33	Chitin extraction and characterization from Daphnia magna resting eggs. International Journal of Biological Macromolecules, 2013, 61, 459-464.	3.6	59
34	Bat guano as new and attractive chitin and chitosan source. Frontiers in Zoology, 2014, 11, .	0.9	59
35	An environmental catalyst derived from biological waste materials for green synthesis of biaryls via Suzuki coupling reactions. Journal of Molecular Catalysis A, 2016, 420, 216-221.	4.8	57
36	Construction of new biopolymer (chitosan)-based pincer-type Pd(II) complex and its catalytic application in Suzuki cross coupling reactions. Journal of Molecular Structure, 2017, 1134, 591-598.	1.8	57

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37	Pd nanoparticles stabilized on the Schiff base-modified boehmite: Catalytic role in Suzuki coupling reaction and reduction of nitroarenes. Journal of Organometallic Chemistry, 2019, 900, 120916.	0.8	56
38	Production of magnetically recoverable, thermally stable, bio-based catalyst: Remarkable turnover frequency and reusability in Suzuki coupling reaction. Chemical Engineering Journal, 2018, 331, 102-113.	6.6	55
39	Cyanation of aryl halides and Suzuki-Miyaura coupling reaction using palladium nanoparticles anchored on developed biodegradable microbeads. International Journal of Biological Macromolecules, 2020, 148, 565-573.	3.6	54
40	Exceptionally high turnover frequencies recorded for a new chitosan-based palladium(II) catalyst. Applied Catalysis A: General, 2016, 523, 12-20.	2.2	53
41	Microwave assisted synthesis of biarlys by CC coupling reactions with a new chitosan supported Pd(II) catalyst. Journal of Molecular Structure, 2016, 1122, 111-116.	1.8	52
42	Highly efficient Suzuki cross-coupling reaction of biomaterial supported catalyst derived from glyoxal and chitosan. Journal of Organometallic Chemistry, 2016, 803, 30-38.	0.8	52
43	A promising nanocatalyst: Upgraded Kraft lignin by titania and palladiumÂ nanoparticles for organic dyes reduction. Inorganic Chemistry Communication, 2021, 130, 108746.	1.8	52
44	Highly efficient, quick and green synthesis of biarlys with chitosan supported catalyst using microwave irradiation in the absence of solvent. Carbohydrate Polymers, 2016, 142, 189-198.	5.1	51
45	Preparation, structural characterization, and catalytic performance of Pd(II) and Pt(II) complexes derived from cellulose Schiff base. Journal of Molecular Structure, 2018, 1160, 154-160.	1.8	49
46	O-carboxymethyl chitosan Schiff base complexes as affinity ligands for immobilized metal-ion affinity chromatography of lysozyme. Journal of Chromatography A, 2018, 1550, 21-27.	1.8	49
47	Recent advances in polymer supported palladium complexes as (nano)catalysts for Sonogashira coupling reaction. Molecular Catalysis, 2020, 480, 110645.	1.0	48
48	Highly recoverable, reusable, cost-effective, and Schiff base functionalized pectin supported Pd(II) catalyst for microwave-accelerated Suzuki cross-coupling reactions. International Journal of Biological Macromolecules, 2019, 127, 232-239.	3.6	47
49	A new air and moisture stable robust bioâ€polymer based palladium catalyst for highly efficient synthesis of biaryl compounds. Applied Organometallic Chemistry, 2018, 32, e4076.	1.7	46
50	Green synthesis of a palladium nanocatalyst anchored on magnetic lignin-chitosan beads for synthesis of biaryls and aryl halide cyanation. International Journal of Biological Macromolecules, 2020, 155, 814-822.	3.6	42
51	Physicochemical Properties of Chitin and Chitosan Produced from Medicinal Fungus (Fomitopsis) Tj ETQq1 1 0.784314 rgBT /Overlock 1	1.4	41
52	Facile preparation of nanostructured Pd-Sch-Î´-FeOOH particles: A highly effective and easily retrievable catalyst for aryl halide cyanation and p-nitrophenol reduction. Journal of Physics and Chemistry of Solids, 2021, 152, 109968.	1.9	38
53	Highly active and recyclable heterogeneous palladium catalyst derived from guar gum for fabrication of biaryl compounds. International Journal of Biological Macromolecules, 2019, 132, 1147-1154.	3.6	37
54	Polymeric material prepared from Schiff base based on O-carboxymethyl chitosan and its Cu(II) and Pd(II) complexes. Journal of Molecular Structure, 2016, 1115, 220-227.	1.8	35

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55	Pd nanoparticles loaded on modified chitosan-Unye bentonite microcapsules: A reusable nanocatalyst for Sonogashira coupling reaction. Carbohydrate Polymers, 2021, 262, 117920.	5.1	32
56	Two novel macroacyclic schiff bases containing bis-N2O2 donor set and their binuclear complexes: synthesis, spectroscopic and magnetic properties. Journal of Molecular Structure, 2009, 922, 39-45.	1.8	30
57	Bio-synthesis and structural characterization of highly stable silver nanoparticles decorated on a sustainable bio-composite for catalytic reduction of nitroarenes. Journal of Molecular Structure, 2019, 1182, 213-218.	1.8	30
58	Efficient degradation of environmental contaminants using Pd-RGO nanocomposite as a retrievable catalyst. Clean Technologies and Environmental Policy, 2020, 22, 325-335.	2.1	28
59	Pd NPs@Fe3O4/chitosan/pumice hybrid beads: A highly active, magnetically retrievable, and reusable nanocatalyst for cyanation of aryl halides. Carbohydrate Polymers, 2020, 237, 116105.	5.1	27
60	Natural porous and nano fiber chitin structure from Gammarus argaeus (Gammaridae Crustacea). EXCLI Journal, 2013, 12, 503-10.	0.5	27
61	Porous and nanofiber Î±-chitosan obtained from blue crab (Callinectes sapidus) tested for antimicrobial and antioxidant activities. LWT - Food Science and Technology, 2016, 65, 1109-1117.	2.5	26
62	Effect of chitosan nanoparticle, QMix, and EDTA on TotalFill BC sealersâ€™ dentinal tubule penetration: a confocal laser scanning microscopy study. Odontology / the Society of the Nippon Dental University, 2019, 107, 64-71.	0.9	26
63	Facile synthesis of Pd nanoparticles supported on a novel Schiff base modified chitosan-kaolin: Antibacterial and catalytic activities in Sonogashira coupling reaction. Journal of Organometallic Chemistry, 2021, 945, 121849.	0.8	26
64	Immobilized palladium nanoparticles on Schiff base functionalized ZnAl layered double hydroxide: A highly stable and retrievable heterogeneous nanocatalyst towards aryl halide cyanations. Applied Clay Science, 2022, 219, 106433.	2.6	25
65	Production of palladium nanocatalyst supported on modified gum arabic and investigation of its potential against treatment of environmental contaminants. International Journal of Biological Macromolecules, 2020, 161, 1559-1567.	3.6	24
66	Highly effective and recoverable Pd(II) catalyst immobilized on thermally stable Schiff base polymer containing phenol group: Production, characterization and application in Suzuki coupling reactions. Journal of Organometallic Chemistry, 2018, 866, 87-94.	0.8	23
67	Production and Application of Highly Efficient and Reusable Palladium Nanocatalyst Decorated on the Magnetically Retrievable Chitosan/Activated Carbon Composite Microcapsules. Catalysis Letters, 2019, 149, 1496-1503.	1.4	23
68	Pd/CoFe2O4/chitosan: A highly effective and easily recoverable hybrid nanocatalyst for synthesis of benzonitriles and reduction of 2-nitroaniline. Journal of Physics and Chemistry of Solids, 2021, 149, 109772.	1.9	23
69	Physicochemical characterization of chitin and chitosan obtained from resting eggs of Ceriodaphnia quadrangula (Branchiopoda: Cladocera: Daphniidae). Journal of Crustacean Biology, 2014, 34, 283-288.	0.3	22
70	The quick extraction of chitin from an epizoic crustacean species (<i>Chelonibia patula</i>). Natural Product Research, 2014, 28, 2186-2190.	1.0	22
71	Incorporation of sporopollenin enhances acidâ€“base durability, hydrophobicity, and mechanical, antifungal and antioxidant properties of chitosan films. Journal of Industrial and Engineering Chemistry, 2017, 47, 236-245.	2.9	22
72	Palladium nanoparticles embedded over chitosan/Î³MnO2 composite hybrid microspheres as heterogeneous nanocatalyst for effective reduction of nitroarenes and organic dyes in water. Journal of Organometallic Chemistry, 2022, 963, 122284.	0.8	22

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73	An inclusive physicochemical comparison of natural and synthetic chitin films. International Journal of Biological Macromolecules, 2018, 106, 1062-1070.	3.6	21
74	Design of highly robust halloysite nanoclay supported palladium complex as a highly active heterogeneous catalyst for construction of biaryls. Applied Clay Science, 2019, 181, 105225.	2.6	20
75	Cationic palladium(II) catalysts on O-carboxymethyl chitosan Schiff base for Suzuki coupling reactions. Journal of Macromolecular Science - Pure and Applied Chemistry, 2016, 53, 687-690.	1.2	19
76	Decorated palladium nanoparticles on chitosan/Î´-FeOOH microspheres: A highly active and recyclable catalyst for Suzuki coupling reaction and cyanation of aryl halides. International Journal of Biological Macromolecules, 2021, 174, 120-133.	3.6	19
77	Production of Pd nanoparticles embedded on micro-sized chitosan/graphitic carbon nitride hybrid spheres for treatment of environmental pollutants in aqueous medium. Ceramics International, 2021, 47, 27736-27747.	2.3	19
78	COMPARISON OF CHITIN STRUCTURES DERIVED FROM THREE COMMON WASP SPECIES (<i>Vespa) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.6	18
79	A combination method based on chitosan adsorption and duckweed (<i>Lemna gibba</i> L.) phytoremediation for boron (B) removal from drinking water. International Journal of Phytoremediation, 2018, 20, 175-183.	1.7	18
80	The presence of Î±-chitin in Tardigrada with comments on chitin in the Ecdysozoa. Zoologischer Anzeiger, 2016, 264, 11-16.	0.4	17
81	Facile fabrication of magnetically separable palladium nanoparticles supported on modified kaolin as a highly active heterogeneous catalyst for Suzuki coupling reactions. Journal of Physics and Chemistry of Solids, 2020, 146, 109566.	1.9	15
82	Synthesis and characterization of Pd(0) Schiff base complex supported on halloysite nanoclay as a reusable catalyst for treating wastewater contaminants in aqueous media. Optik, 2021, 238, 166672.	1.4	15
83	Catalytic activity of palladium doped activated carbon from waste coffee on some environmental pollutants. Materials Chemistry and Physics, 2022, 282, 125857.	2.0	14
84	Supported Pd nanoparticles on micro structured chitosan-MgAl layered double hydroxide hydrogel beads as a sustainable, effective, and recyclable nanocatalyst for Heck cross-coupling reactions. Journal of Physics and Chemistry of Solids, 2022, 167, 110777.	1.9	14
85	Evaluation and application of an innovative method based on various chitosan composites and Lemna gibba for boron removal from drinking water. Carbohydrate Polymers, 2017, 166, 209-218.	5.1	13
86	Bentonite-supported furfural-based Schiff base palladium nanoparticles: an efficient catalyst in treatment of water/wastewater pollutants. Journal of Materials Science: Materials in Electronics, 2020, 31, 12856-12871.	1.1	13
87	Characterisation of Î±-chitin extracted from a lichenised fungus species <i>Xanthoria parietina</i>. Natural Product Research, 2015, 29, 1280-1284.	1.0	12
88	Assessment of a Pdâ€"Fe3O4-biochar nanocomposite as a heterogeneous catalyst for the solvent-free Suzuki-Miyaura reaction. Materials Chemistry and Physics, 2021, 259, 124176.	2.0	12
89	Green synthesis of palladium nanocatalyst derived from the Î²-cyclodextrin used as effective heterogeneous catalyst for cyanation of aryl halides. Inorganic Chemistry Communication, 2020, 119, 108117.	1.8	10
90	How Taxonomic Relations Affect the Physicochemical Properties of Chitin. Food Biophysics, 2016, 11, 10-19.	1.4	9

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91	Solvent-free, microwave-assisted highly efficient, rapid and simple synthesis of biphenyl compounds by using silica based Pd(II) catalyst. Journal of Macromolecular Science - Pure and Applied Chemistry, 2018, 55, 280-287.	1.2	9
92	Modified chitosan-zeolite supported Pd nanoparticles: A reusable catalyst for the synthesis of 5-substituted-1H-tetrazoles from aryl halides. International Journal of Biological Macromolecules, 2022, 209, 1573-1585.	3.6	9
93	Synthesis and spectroscopic studies of homo-binuclear, alkoxo bridged homo- and hetero-tetranuclear metal complexes of a bis-N2O4 Schiff base ligand derived from ethanolamine and macroacyclic tetranaphthaldehyde. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2011, 79, 867-872.	2.0	8
94	Studies on synthesis, structure, and DNA cleaving of homo-dinuclear Mn(II), Cu(II), Ni(II), and Zn(II) complexes with a heterocycle-based macroacyclic Schiff base. Monatshefte FÃ¼r Chemie, 2013, 144, 1107-1115.	0.9	8
95	An easily fabricated palladium nanocatalyst on magnetic biochar for Suzukiâ€“Miyaura and aryl halide cyanation reactions. New Journal of Chemistry, 2021, 45, 12519-12527.	1.4	8
96	Design of nanostructured palladium catalyst supported by chitosan/Co3O4 microspheres and investigation of its catalytic behavior against synthesis of benzonitriles. International Journal of Biological Macromolecules, 2021, 182, 722-729.	3.6	8
97	Preparation and Application of a Hydrochar-Based Palladium Nanocatalyst for the Reduction of Nitroarenes. Molecules, 2021, 26, 6859.	1.7	8
98	Novel chitosan based smart cathode electrocatalysts for high power generation in plant based-sediment microbial fuel cells. Carbohydrate Polymers, 2020, 239, 116235.	5.1	7
99	Design of a palladium nanocatalyst produced from Schiff base modified dialdehyde cellulose and its application in aryl halide cyanation and reduction of nitroarenes. Cellulose, 2022, 29, 4475-4493.	2.4	7
100	Functionalized rGO-Pd nanocomposites as high-performance catalysts for hydrogen generation via water electrolysis. Electrochimica Acta, 2022, 422, 140513.	2.6	7
101	Facile synthesis of biaryls by palladium nanoparticles adorned on kaolin/NiFe2O4 composite as a magnetically retrievable nanocatalyst. Colloids and Interface Science Communications, 2021, 43, 100445.	2.0	6
102	Characterisation of chitin in the cuticle of a velvet worm (Onychophora). Turkish Journal of Zoology, 2019, 43, 416-424.	0.4	5
103	Recent developments in polymer-supported ruthenium nanoparticles/complexes for oxidation reactions. Journal of Organometallic Chemistry, 2021, 933, 121658.	0.8	5
104	Fabrication of Palladium Nanoparticles Supported on Natural Volcanic Tuff/Fe3O4 and Its Catalytic Role in Microwave-Assisted Suzukiâ€“Miyaura Coupling Reactions. Catalysis Letters, 2021, 151, 1102-1110.	1.4	5
105	Mesoporous chromium oxide doped palladium catalysis for cyanation reaction of some aryl halides. Ceramics International, 2021, 47, 27816-27821.	2.3	5
106	Cytotoxic and apoptotic activities of novel Pd(II) complexes against human leukemia cell lines in vitro. Journal of Macromolecular Science - Pure and Applied Chemistry, 2017, 54, 263-270.	1.2	4
107	Fabrication of palladium nanocatalyst supported on magnetic eggshell and its catalytic character in the catalytic reduction of nitroarenes in water. Journal of Organometallic Chemistry, 2021, 950, 121978.	0.8	3
108	HIGHLY ACTIVE AND ROBUST PALLADIUM NANOPARTICLES IMMOBILIZED ON BIODEGRADABLE MICROCAPSULES CONTAINING CHITOSAN-GUAR GUM COMPOSITE FOR SYNTHESIS OF BIARYL COMPOUNDS. Konya Journal of Engineering Sciences, 2020, 8, 113-121.	0.1	2

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109	Biopolymer-based metal nanoparticles for biosensing. , 2021, , 573-608.		1
110	Biomedical applications of biopolymer-based (nano)materials. , 2021, , 189-332.		1
111	Antitumor and apoptotic effects of new-generation platinum compounds on human leukemia cell lines HL-60 and K562. Biologia (Poland), 2022, 77, 249.	0.8	0