Franca Bigi

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4892232/publications.pdf

Version: 2024-02-01

113 papers	4,492 citations	35 h-index	62 g-index
P. P. 02.0	5250.520		S
163 all docs	163 docs citations	163 times ranked	4567 citing authors

#	Article	IF	CITATIONS
1	Protection (and Deprotection) of Functional Groups in Organic Synthesis by Heterogeneous Catalysis. Chemical Reviews, 2004, 104, 199-250.	47.7	403
2	Montmorillonite KSF as an Inorganic, Water Stable, and Reusable Catalyst for the Knoevenagel Synthesis of Coumarin-3-carboxylic Acids. Journal of Organic Chemistry, 1999, 64, 1033-1035.	3.2	328
3	A revision of the Biginelli reaction under solid acid catalysis. Solvent-free synthesis of dihydropyrimidines over montmorillonite KSF. Tetrahedron Letters, 1999, 40, 3465-3468.	1.4	280
4	Selected syntheses of ureas through phosgene substitutes. Green Chemistry, 2000, 2, 140-148.	9.0	218
5	Clean synthesis in water. Part 2: Uncatalysed condensation reaction of Meldrum's acid and aldehydes. Tetrahedron Letters, 2001, 42, 5203-5205.	1.4	136
6	Clean synthesis in water: uncatalysed preparation of ylidenemalononitriles. Green Chemistry, 2000, 2, 101-103.	9.0	127
7	Supported organic catalysts: synthesis of (E)-nitrostyrenes from nitroalkanes and aromatic aldehydes over propylamine supported on MCM-41 silica as a reusable catalyst. Tetrahedron Letters, 2001, 42, 2401-2403.	1.4	104
8	Heterogeneous enantioselective epoxidation of olefins catalysed by unsymmetrical (salen)Mn(iii) complexes supported on amorphous or MCM-41 silica through a new triazine-based linkerElectronic supplementary information (ESI) available: synthesis of compounds 1, 3A, 3B, 4A, 4B and 1H NMR spectra. See http://www.rsc.org/suppdata/cc/b1/b110991j/. Chemical Communications, 2002, , 716-717.	4.1	86
9	Synthesis of SymmetricalN,Nâ€~-Disubstituted Thioureas and Heterocyclic Thiones from Amines and CS2over a ZnO/Al2O3Composite as Heterogeneous and Reusable Catalyst. Journal of Organic Chemistry, 1999, 64, 1029-1032.	3.2	85
10	Immobilization of (n-Bu4N)4W10O32 on Mesoporous MCM-41 and Amorphous Silicas for Photocatalytic Oxidation of Cycloalkanes with Molecular Oxygen. Journal of Catalysis, 2002, 209, 210-216.	6.2	85
11	Selective oxidation of sulfides to sulfoxides and sulfones using 30% aqueous hydrogen peroxide and silica-vanadia catalyst. Journal of Molecular Catalysis A, 2008, 286, 124-127.	4.8	85
12	Catalytic activity of aminopropyl xerogels in the selective synthesis of (E)-nitrostyrenes from nitroalkanes and aromatic aldehydes. Journal of Catalysis, 2004, 222, 410-418.	6.2	84
13	Silica-bound decatungstates as heterogeneous catalysts for H2O2 activation in selective sulfide oxidation. Journal of Catalysis, 2007, 250, 222-230.	6.2	83
14	Uncatalysed reactions in water: Part 2. Preparation of 3-carboxycoumarins. Green Chemistry, 2001, 3, 173-174.	9.0	69
15	Asymmetric electrophilic substitution on phenols. Enantioselective ortho-hydroxyalkylation mediated by chiral alkoxyaluminum chlorides. Journal of Organic Chemistry, 1985, 50, 5018-5022.	3.2	67
16	Multicomponent reactions under clay catalysis. Catalysis Today, 2000, 60, 305-309.	4.4	64
17	Porphyrin conjugated SiC/SiOx nanowires for X-ray-excited photodynamic therapy. Scientific Reports, 2015, 5, 7606.	3.3	64
18	Solvent free tetrahydropyranylation of phenols and alcohols over zeolites HSZ as reusable catalysts. Tetrahedron Letters, 1997, 38, 4169-4172.	1.4	59

#	Article	IF	CITATIONS
19	Zeolite-Induced Heterodomino Reaction. Regioselective Synthesis of 2H-1-Benzopyrans from Phenols and α-Alkynols. Journal of Organic Chemistry, 1997, 62, 7024-7027.	3.2	57
20	\hat{l}_{\pm} -Fluorotropinone Immobilized on Silica: \hat{A} A New Stereoselective Heterogeneous Catalyst for Epoxidation of Alkenes with Oxone. Journal of Organic Chemistry, 2003, 68, 3232-3237.	3.2	57
21	Macroalgae to nanoparticles: Study of Ulva lactuca L. role in biosynthesis of gold and silver nanoparticles and of their cytotoxicity on colon cancer cell lines. Materials Science and Engineering C, 2019, 97, 498-509.	7.3	57
22	Electrophilic alkenylation of aromatics with phenylacetylene over zeolite HSZ-360. Tetrahedron Letters, 1995, 36, 9177-9180.	1.4	50
23	Ortho-coordinated acylation of phenol systems. Journal of Organic Chemistry, 1990, 55, 4371-4377.	3.2	49
24	Oxidative coupling of dichloroaluminium phenolates: Highly selective synthesis of hydroxylated Biand tetraaryls. Tetrahedron, 1992, 48, 9483-9494.	1.9	46
25	Synthesis of silver and gold nanoparticles by Sargassum muticum biomolecules and evaluation of their antioxidant activity and antibacterial properties. Journal of Nanostructure in Chemistry, 2020, 10, 317-330.	9.1	46
26	Selective photooxidation of diols with silica bound W10O324â^. Journal of Catalysis, 2008, 253, 312-317.	6.2	45
27	Regioselective electrophilic alkylation of anilines with phenylacetylene in the presence of montmorillonite KSF. Tetrahedron, 1997, 53, 3795-3804.	1.9	44
28	Cytocompatibility and Cellular Internalization Mechanisms of SiC/SiO ₂ Nanowires. Nano Letters, 2014, 14, 4368-4375.	9.1	44
29	Oxidation of hydroquinones to benzoquinones with hydrogen peroxide using catalytic amount of silver oxide under batch and continuous-flow conditions. Journal of Catalysis, 2010, 271, 99-103.	6.2	41
30	Zeolite as Base Catalyst: Nitroaldolic Condensation. Journal of Catalysis, 2000, 191, 348-353.	6.2	39
31	Stepwise synthesis and structural characterization of calix[4]- and calix[5] arenes bearing a functionalized arm on the methylene bridge. Tetrahedron, 1997, 53, 13037-13052.	1.9	38
32	Asymmetric electrophilic substitution on phenols. 2. Enantio- and diastereoselective synthesis of o-hydroxyatrolactic esters. Journal of Organic Chemistry, 1988, 53, 1779-1785.	3.2	37
33	Highly regio- and diastereoselective Friedel-Crafts alkylation of phenols. Synthesis of 2-hydroxymandelic esters Tetrahedron: Asymmetry, 1990, 1, 861-864.	1.8	37
34	The Knoevenagel Condensation in Water. Current Organic Synthesis, 2012, 9, 31-39.	1.3	37
35	Semi-Reduction of Internal Alkynes with Prototypical Subnanometric Metal Surfaces: Bridging Homogeneous and Heterogeneous Catalysis with Trinuclear All-Metal Aromatics. ACS Sustainable Chemistry and Engineering, 2017, 5, 8205-8212.	6.7	37
36	Immunostimulant and biocompatible gold and silver nanoparticles synthesized using the <i>Ulva intestinalis</i> L. aqueous extract. Journal of Materials Chemistry B, 2019, 7, 4677-4691.	5.8	37

#	Article	IF	Citations
37	Acid-catalysed synthesis of a new class of calix[4] arenes. Journal of the Chemical Society Perkin Transactions 1, 1994, , 1657.	0.9	36
38	Homogeneous versus heterogeneous approach to the catalytic desymmetrisation of meso-anhydrides promoted by cinchona alkaloids. Journal of Molecular Catalysis A, 2002, 182-183, 533-539.	4.8	34
39	Boosting catalyst activity in cis-selective semi-reduction of internal alkynes by tailoring the assembly of all-metal aromatic tri-palladium complexes. Dalton Transactions, 2016, 45, 15786-15790.	3.3	33
40	Selective synthesis of unsymmetrical hydroxylated and methoxylated biaryls. Journal of Organic Chemistry, 1993, 58, 7271-7273.	3.2	32
41	Highly selective conversion of hydroxylated biaryls to dibenzofuran derivatives over zeolite catalyst. Journal of the Chemical Society Perkin Transactions 1, 1997, , 1391-1394.	0.9	32
42	A Rationale of the Baeyer–Villiger Oxidation of Cyclohexanone to εâ€Caprolactone with Hydrogen Peroxide: Unprecedented Evidence for a Radical Mechanism Controlling Reactivity. Chemistry - A European Journal, 2010, 16, 12962-12969.	3.3	32
43	Reaction of aromatic amines and ethyl acetoacetate promoted by zeolite HSZ-360. Phosgene-free synthesis of symmetric diphenylureas. Chemical Communications, 1998, , 513-514.	4.1	31
44	Stereoselective Synthesis of Optically Active 2-Hydroxymandelic Acids and Esters via Friedelâ-'Crafts Coordinated Reaction:Â Crystal Structure of Chiral Dichloro [2-(1-oxido-1-menthoxy-) Tj ETQq0 0 0 rgBT /Overlog	ck 10 Tf 50	0 462 Td (carb
45	5004-5009. Friedel-Crafts coordinated processes: highly selective synthesis of hydroxynaphthoquinones. Journal of Organic Chemistry, 1993, 58, 840-843.	3.2	30
46	Catalytic Semireduction of Internal Alkynes with Allâ€Metal Aromatic Complexes. ChemCatChem, 2015, 7, 3266-3269.	3.7	30
47	Alternative Routes to Tricyclic Cyclohexenes with Trinuclear Palladium Complexes. ACS Catalysis, 2018, 8, 144-147.	11.2	30
48	Metal template ortho-acylation of phenols; A new general approach to anthracyclinones. Tetrahedron Letters, 1987, 28, 1533-1536.	1.4	29
49	Highly regio- and diastereoselective friedel-crafts alkylation of phenols with α-amino aldehydes. Synthesis of optically active ephedrine-like compounds. Tetrahedron Letters, 1989, 30, 1121-1124.	1.4	29
50	Trialkylamine Controlled Phenol–Formaldehyde Reaction over Clay Catalysts: Selective and Environmentally Benign Synthesis of Salicylic Aldehydes. Tetrahedron, 2000, 56, 2709-2712.	1.9	29
51	An Investigation of the Reaction Mechanism of the Bis-acylation of Aromatics with o-Phthaloyl Dichlorides: Regioselective Synthesis of Anthraquinones. Journal of Organic Chemistry, 1995, 60, 6588-6591.	3.2	28
52	Reaction of Aliphatic Amines with Acetoacetanilide in the Presence of Zeolite Catalyst. Solvent-Free Synthesis of SymmetricN,Nâ€~-Dialkylureas. Journal of Organic Chemistry, 1999, 64, 1004-1006.	3.2	28
53	Chiral separation of unmodified α-hydroxy acids by ligand exchange HPLC using chiral copper(II) complexes of (S)-phenylalaninamide as additives to the eluent. Chirality, 1995, 7, 331-336.	2.6	27
54	Reaction between Phenols and Isoprene under Zeolite Catalysis. Highly Selective Synthesis of Chromans and o-Isopentenylphenols. Synthesis, 1998, 1998, 301-304.	2.3	27

#	Article	IF	Citations
55	Silica-supported sulfonic acids as recyclable catalyst for esterification of levulinic acid with stoichiometric amounts of alcohols. Beilstein Journal of Organic Chemistry, 2016, 12, 2173-2180.	2.2	27
56	A Simple Synthesis of Triangular Allâ€Metal Aromatics Allowing Access to Isolobal Allâ€Metal Heteroaromatics. Chemistry - A European Journal, 2015, 21, 12271-12274.	3.3	24
57	Unusual Friedel-Crafts Reactions; I. Exclusiveortho-Allylation of Phenols. Synthesis, 1981, 1981, 310-312.	2.3	22
58	Dehydration-hydration of \hat{l} ±-alkynols over zeolite catalyst. Selective synthesis of conjugated enynes and \hat{l} ±, \hat{l} 2-unsaturated ketones. Tetrahedron, 1996, 52, 8287-8296.	1.9	22
59	Molybdenum-MCM-41 silica as heterogeneous catalyst for olefin epoxidation. Journal of Molecular Catalysis A, 2014, 386, 108-113.	4.8	21
60	Unusual Friedel-Crafts reactions, IX. One-step ortho-acylation of phenols with $\hat{l}\pm,\hat{l}^2$ -unsaturated acyl chlorides. Synthesis of 2'-hydroxychalcones and sorbicillin analogues. Tetrahedron, 1984, 40, 4081-4084.	1.9	20
61	Regiochemical control in the oxidative coupling of metal phenolates: Highly selective synthesis of symmetric, hydroxylated biaryls. Tetrahedron Letters, 1992, 33, 2207-2210.	1.4	20
62	Allylic oxidation of olefins in the presence of Cu-Na-HSZ-320 zeolite as reusable solid catalyst. Tetrahedron Letters, 2000, 41, 8947-8950.	1.4	20
63	HY zeolite-promoted electrophilic acylation of methoxyarenes with linear acid chlorides. Journal of Molecular Catalysis A, 2002, 178, 139-146.	4.8	20
64	Saccorhiza polyschides used to synthesize gold and silver nanoparticles with enhanced antiproliferative and immunostimulant activity. Materials Science and Engineering C, 2021, 123, 111960.	7.3	20
65	Unusual Friedel–Crafts reactions. Part 7. Synthesis of α-(2-hydroxyphenyl)ethyl lactates and their reductive cyclization to 3-methyl-2,3-dihydrobenzofuran-2-ols. Journal of the Chemical Society Perkin Transactions 1, 1983, , 1649-1651.	0.9	19
66	Chiral ionic liquids for catalytic enantioselective sulfide oxidation. Comptes Rendus Chimie, 2011, 14, 685-687.	0.5	19
67	Modification of the nickl reaction. Tetrahedron, 1983, 39, 169-174.	1.9	18
68	Acylation of aroyl chlorides via a template Friedel–Crafts process: synthesis of indan-1,3-diones. Journal of the Chemical Society Perkin Transactions 1, 1992, , 2985-2988.	0.9	18
69	Metal-template ortho-regioselective synthesis of 2′-hydroxyphenylpyridinemethanols. Tetrahedron, 1994, 50, 10587-10596.	1.9	18
70	Selective synthesis of 1-indanones via tandem knoevenagel condensation-cycloalkylation of \hat{l}^2 -dicarbonyl compounds and aldehydes. Tetrahedron, 1995, 51, 12179-12192.	1.9	18
71	Unusual Friedel-Crafts Reactions; 41. Synthesis of 2,4-Diphenyl-2-methyl-1,2-dihydroquinolines from Anilines and Phenylacetylene. Synthesis, 1981, 1981, 975-977.	2.3	17
72	Dalton communications. Organic nitro compounds as ligands. A comparison between the ligand behaviour of MeNO2 and PhNO2 towards AlCl3. Journal of the Chemical Society Dalton Transactions, 1993, , 1463.	1.1	17

#	Article	IF	Citations
73	Reaction of nitromethane with aluminium phenolates: Mild synthesis of salicylaldoximes. Tetrahedron Letters, 1994, 35, 2393-2396.	1.4	17
74	Selective synthesis of unsymmetrical 2,2′-dihydroxylated biaryls via electrophilic arylation of metal phenolates with p-benzoquinone monoketals. Journal of the Chemical Society Perkin Transactions 1, 1995, , 2177-2181.	0.9	17
75	Unusual Friedel-Crafts reactions. Part 8. Synthesis of 2-hydroxyarylglyoxylic acids via ortho-specific oxaloylation of phenols with oxalyl chloride. Journal of the Chemical Society Perkin Transactions 1, 1984, , 2655.	0.9	16
76	Synthesis of optically active 4-hydroxymandelic acid and derivatives via Regio- and Stereoselective Friedel-Crafts alkylation Tetrahedron: Asymmetry, 1993, 4, 2411-2414.	1.8	16
77	Lorentz microscopy sheds light on the role of dipolar interactions in magnetic hyperthermia. Nanoscale, 2015, 7, 7717-7725.	5.6	16
78	Unusual friedelâ€crafts reactions. 3 . Synthesis of 2,4â€Diethoxychromans and their conversion into benzopyrylium perchlorates. Journal of Heterocyclic Chemistry, 1981, 18, 1325-1328.	2.6	15
79	Metal-template ortho-regioselective mono- and bis-de-tert-butylation of poly-tert-butylated phenols. Tetrahedron Letters, 1994, 35, 7073-7076.	1.4	15
80	Friedel-crafts coordinated processes: Highly selective synthesis of ethyl-1-oxo-2-indancarboxylates and 1-oxo-2-acetylindanes. Tetrahedron Letters, 1992, 33, 4771-4774.	1.4	14
81	Synthesis of a new ortho-tert-butylphenol-based calix[4] arene. Tetrahedron Letters, 1995, 36, 2311-2314.	1.4	14
82	Acidity effect in the regiochemical control of the alkylation of phenol with alkenes. Journal of the Chemical Society Perkin Transactions 1, 1997, , 257-260.	0.9	14
83	Silica Nanoparticles Decorated with Polymeric Sulfonic Acids Trigger Selective Oxidation of Benzylic Methylenes to Aldehydic and Ketonic Carbonyls. ACS Sustainable Chemistry and Engineering, 2019, 7, 5886-5891.	6.7	13
84	Calixarenes with exo-hydroxy groups: Synthesis, crystal and molecular structure of ortho-tert-butylphenol-based calix[4]-, calix[6]- and calix[8] arenes. Tetrahedron, 1997, 53, 3287-3300.	1.9	12
85	Enantioselective ortho-hydroxyalkylation of phenols promoted by chiral alkoxyaluminium chlorides. Journal of the Chemical Society Chemical Communications, 1983, , 1210.	2.0	11
86	Metal Templateortho-Acylation of Phenols. Direct Synthesis of Salicylic Acid Chlorides and Derivatives. Synthesis, 1988, 1988, 763-766.	2.3	11
87	A Stepwise Synthesis of Hydroxylated Polyaryls. Journal of Organic Chemistry, 1994, 59, 3701-3703.	3.2	11
88	New Direct Synthesis of Persubstituted 4-Hydroxy-2-pyrones. Synthesis, 1993, 1993, 851-852.	2.3	10
89	Montmorillonite KSF-catalysed regioselective trans-tert-butylation of tert-butylphenols. Tetrahedron Letters, 2001, 42, 6543-6545.	1.4	10
90	Immunomodulatory and Antitumoral Activity of Gold Nanoparticles Synthesized by Red Algae Aqueous Extracts. Marine Drugs, 2022, 20, 182.	4.6	10

#	Article	IF	Citations
91	Unusual Friedel-Crafts Reactions; 51. Synthesis of Salicylanilides viaortho-Aminocarbonylation of Phenols with Phenyl Isocyanate. Synthesis, 1982, 1982, 879-881.	2.3	9
92	Unusual friedel-crafts reactions—vi. Tetrahedron, 1983, 39, 1761-1764.	1.9	9
93	Acylating Friedel–Crafts complexes: multinuclear NMR data and chemical reactivity. Journal of the Chemical Society Perkin Transactions II, 1991, , 1319-1321.	0.9	9
94	Friedel-crafts coordinated processes: Selective cyclooligomerization of acyl chlorides. Tetrahedron Letters, 1991, 32, 2153-2156.	1.4	9
95	Highly stereocontrolled substitution of phenols with pyruvic esters. A viable route to -hydroxyatrolactic esters of (2R)- and (2S)-configuration. Tetrahedron Letters, 1985, 26, 2021-2024.	1.4	8
96	Metalâ€Template Electrophilic Substitution on Phenols: Synthesis and Crystal Structure of Bromomagnesium Phenolate and Its Reactive Complex with ⟨i⟩para⟨/i⟩â€Isopropylbenzaldehyde. Chemistry - A European Journal, 1997, 3, 1269-1272.	3.3	8
97	Selective monomethyl esterification of linear dicarboxylic acids with bifunctional alumina catalysts. Green Chemistry, 2016, 18, 5764-5768.	9.0	8
98	Reinvestigation of the Pummerer arylation of quinones: a selective approach to $2,2\hat{a}\in^2,5\hat{a}\in^2$ -trihydroxybiaryls. Journal of the Chemical Society Perkin Transactions 1, 1993, , 39-42.	0.9	7
99	Chemoselectivity in the reaction of metal phenolates with aromatic dialdehydes. Journal of the Chemical Society Perkin Transactions $1,1994,,1879.$	0.9	7
100	Is Aromaticity a Driving Force in Catalytic Cycles? A Case from the Cycloisomerization of Enynes Catalyzed by All-Metal Aromatic Pd ₃ ⁺ Clusters and Carboxylic Acids. Journal of Physical Chemistry A, 2021, 125, 10035-10043.	2.5	7
101	Synthetic recovery of impulse propagation in myocardial infarction via silicon carbide semiconductive nanowires. Nature Communications, 2022, 13, 6.	12.8	7
102	ortho-Regioselective arylation of phenols: new general synthesis of ortho-hydroxyarylhydroquinone bis (methyl ethers). Journal of the Chemical Society Perkin Transactions 1, 1991, , 3059.	0.9	6
103	A new entry to (E)-[3,3'] bibenzofuranylidene-2,2″-diones (isoxindigos). Tetrahedron, 1983, 39, 2147-2150.	1.9	5
104	Heterogenous catalysis in fine chemistry: the Heck reaction on Pd/SiO2 catalysts. Research on Chemical Intermediates, 2003, 29, 285-291.	2.7	5
105	Discrimination properties of tetraamidic branched selectors. Journal of Chromatography A, 1998, 802, 315-324.	3.7	4
106	Solvent effect in the "fragment condensation―synthesis of calix[4]arenes and temperature dependent 1H-NMR studies of new dihomomonoxacalixarenes. Tetrahedron Letters, 1995, 36, 8323-8326.	1.4	3
107	Silicon Carbide-Based Nanowires for Biomedical Applications. , 2016, , 311-342.		3
108	Aluminium chloride \hat{A} ·2-isocyanatobenzoyl chloride complex: crystal structure and reactivity. Journal of the Chemical Society Perkin Transactions 1, 1996, , 1815-1818.	0.9	2

#	Article	IF	CITATIONS
109	X-ray structural investigation of 1,3,6,8-tetramethyl-10-(4-m.xilenyl-2,6-pyridyl diketone) anthracene. Journal of Crystallographic and Spectroscopic Research, 1992, 22, 691-694.	0.2	O
110	tert-Butyl 2-[(Hydroxy)(5-hydroxy-1,3-benzodioxol-6-yl)methyl]pyrrolidine-1-carboxylate. Acta Crystallographica Section C: Crystal Structure Communications, 1995, 51, 993-995.	0.4	0
111	\hat{l}_{\pm} -Fluorotropinone Immobilized on Silica: A New Stereoselective Heterogeneous Catalyst for Epoxidation of Alkenes with Oxone ChemInform, 2003, 34, no.	0.0	0
112	Protection (and Deprotection) of Functional Groups in Organic Synthesis by Heterogeneous Catalysis. ChemInform, 2004, 35, no.	0.0	0
113	Cytocompatible SiC/SiOx nanowires for X-ray-excited photodynamic therapy. , 2015, , .		0