Wei Gao

List of Publications by Year
in descending order

104 papers	3,555 citations	159358 30 h-index	161609 54 g-index
121 all docs	121 docs citations	121 times ranked	3839 citing authors

#	Article	IF	Citations
1	Association Between Hypoxemia and Mortality in Patients With COVID-19. Mayo Clinic Proceedings, 2020, 95, 1138-1147.	1.4	390
2	Modular Pathway Engineering of Diterpenoid Synthases and the Mevalonic Acid Pathway for Miltiradiene Production. Journal of the American Chemical Society, 2012, 134, 3234-3241.	6.6	326
3	A Functional Genomics Approach to Tanshinone Biosynthesis Provides Stereochemical Insights. Organic Letters, 2009, 11, 5170-5173.	2.4	250
4	Combining metabolomics and transcriptomics to characterize tanshinone biosynthesis in Salvia miltiorrhiza. BMC Genomics, 2014, 15, 73.	1.2	165
5	Celastrol mediates autophagy and apoptosis via the ROS/JNK and Akt/mTOR signaling pathways in glioma cells. Journal of Experimental and Clinical Cancer Research, 2019, 38, 184.	3.5	133
6	Tanshinones, Critical Pharmacological Components in Salvia miltiorrhiza. Frontiers in Pharmacology, 2019, 10, 202.	1.6	129
7	Genome of Tripterygium wilfordii and identification of cytochrome P450 involved in triptolide biosynthesis. Nature Communications, 2020, 11, 971.	5.8	103
8	Celastrol Suppresses Glioma Vasculogenic Mimicry Formation and Angiogenesis by Blocking the PI3K/Akt/mTOR Signaling Pathway. Frontiers in Pharmacology, 2020, 11, 25.	1.6	81
9	Friedelaneâ€type triterpene cyclase in celastrol biosynthesis from Tripterygium wilfordii and its application for triterpenes biosynthesis in yeast. New Phytologist, 2019, 223, 722-735.	3.5	80
10	A novel glucuronosyltransferase has an unprecedented ability to catalyse continuous twoâ€step glucuronosylation of glycyrrhetinic acid to yield glycyrrhizin. New Phytologist, 2016, 212, 123-135.	3.5	72
11	Engineering chimeric diterpene synthases and isoprenoid biosynthetic pathways enables high-level production of miltiradiene in yeast. Metabolic Engineering, 2020, 60, 87-96.	3.6	72
12	Research progress relating to the role of cytochrome P450 in the biosynthesis of terpenoids in medicinal plants. Applied Microbiology and Biotechnology, 2014, 98, 2371-2383.	1.7	67
13	RNA interference-mediated repression of SmCPS (copalyldiphosphate synthase) expression in hairy roots of Salvia miltiorrhiza causes a decrease of tanshinones and sheds light on the functional role of SmCPS. Biotechnology Letters, 2014, 36, 363-369.	1.1	64
14	Effects of Combined Elicitors on Tanshinone Metabolic Profiling and SmCPS Expression in Salvia miltiorrhiza Hairy Root Cultures. Molecules, 2013, 18, 7473-7485.	1.7	62
15	Triptolide: pharmacological spectrum, biosynthesis, chemical synthesis and derivatives. Theranostics, 2021, 11, 7199-7221.	4.6	57
16	Molecular Cloning and Characterization of DXS and DXR Genes in the Terpenoid Biosynthetic Pathway of Tripterygium wilfordii. International Journal of Molecular Sciences, 2015, 16, 25516-25535.	1.8	56
17	The chromosome-level reference genome assembly for Panax notoginseng and insights into ginsenoside biosynthesis. Plant Communications, 2021, 2, 100113.	3.6	54
18	Identification and functional characterization of diterpene synthases for triptolide biosynthesis from Tripterygium wilfordii. Plant Journal, 2018, 93, 50-65.	2.8	52

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19	Comparison Between Extracorporeal Shock Wave Lithotripsy and Ureteroscopic Lithotripsy for Treating Large Proximal Ureteral Stones: A Meta-analysis. Urology, 2015, 85, 748-756.	0.5	46
20	Hobnail variant of papillary thyroid carcinoma: molecular profiling and comparison to classical papillary thyroid carcinoma, poorly differentiated thyroid carcinoma and anaplastic thyroid carcinoma. Oncotarget, 2017, 8, 22023-22033.	0.8	46
21	Functional characterization of ent-copalyl diphosphate synthase, kaurene synthase and kaurene oxidase in the Salvia miltiorrhiza gibberellin biosynthetic pathway. Scientific Reports, 2016, 6, 23057.	1.6	45
22	Molecular Cloning and Characterisation of Farnesyl Pyrophosphate Synthase from Tripterygium wilfordii. PLoS ONE, 2015, 10, e0125415.	1.1	40
23	Biosynthesis, total synthesis, structural modifications, bioactivity, and mechanism of action of the quinoneâ€methide triterpenoid celastrol. Medicinal Research Reviews, 2021, 41, 1022-1060.	5.0	40
24	Characterization of eight terpenoids from tissue cultures of the Chinese herbal plant, Tripterygium wilfordii, by highâ€performance liquid chromatography coupled with electrospray ionization tandem mass spectrometry. Biomedical Chromatography, 2014, 28, 1183-1192.	0.8	39
25	Recent progress and new perspectives for diterpenoid biosynthesis in medicinal plants. Medicinal Research Reviews, 2021, 41, 2971-2997.	5.0	39
26	Antimicrobial Resistance Analysis of Clinical Escherichia coli Isolates in Neonatal Ward. Frontiers in Pediatrics, 2021, 9, 670470.	0.9	39
27	Triptolide Induces Glioma Cell Autophagy and Apoptosis via Upregulating the ROS/JNK and Downregulating the Akt/mTOR Signaling Pathways. Frontiers in Oncology, 2019, 9, 387.	1.3	37
28	Melatonin functions in priming of stomatal immunity inPanax notoginseng and Arabidopsis thaliana. Plant Physiology, 2021, 187, 2837-2851.	2.3	37
29	Value of 18F-FDG PET/CT in differentiating malignancy of pulmonary artery from pulmonary thromboembolism: a cohort study and literature review. International Journal of Cardiovascular Imaging, 2019, 35, 1395-1403.	0.7	35
30	Cloning and Characterisation of the Gene Encoding 3-Hydroxy-3-Methylglutaryl-CoA Synthase in Tripterygium wilfordii. Molecules, 2014, 19, 19696-19707.	1.7	34
31	A cytochrome P450 monooxygenase responsible for the C-22 hydroxylation step in the Paris polyphylla steroidal saponin biosynthesis pathway. Phytochemistry, 2018, 156, 116-123.	1.4	29
32	Salidroside alleviated hypoxia-induced liver injury by inhibiting endoplasmic reticulum stress-mediated apoptosis via IRE1Îˆ/JNK pathway. Biochemical and Biophysical Research Communications, 2020, 529, 335-340.	1.0	29
33	Molecular characteristics of the new emerging global clone ST1193 among clinical isolates of Escherichia coli from neonatal invasive infections in China. European Journal of Clinical Microbiology and Infectious Diseases, 2021, 40, 833-840.	1.3	27
34	Identification of geranylgeranyl diphosphate synthase genes from Tripterygium wilfordii. Plant Cell Reports, 2015, 34, 2179-2188.	2.8	25
35	Genetic Transformation System for Woody Plant Tripterygium wilfordii and Its Application to Product Natural Celastrol. Frontiers in Plant Science, 2017, 8, 2221.	1.7	25
36	Single-Use Versus Reusable Digital Flexible Ureteroscopes for the Treatment of Renal Calculi: A Prospective Multicenter Randomized Controlled Trial. Journal of Endourology, 2020, 34, 18-24.	1.1	24

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37	Probing the Single Key Amino Acid Responsible for the Novel Catalytic Function of ent-Kaurene Oxidase Supported by NADPH-Cytochrome P450 Reductases in Tripterygium wilfordii. Frontiers in Plant Science, 2017, 8, 1756.	1.7	21
38	Glucosyltransferase Capable of Catalyzing the Last Step in Neoandrographolide Biosynthesis. Organic Letters, 2018, 20, 5999-6002.	2.4	20
39	Functional characterization of squalene epoxidase genes in the medicinal plant Tripterygium wilfordii. International Journal of Biological Macromolecules, 2018, 120, 203-212.	3.6	20
40	Identification and functional characterization of squalene epoxidases and oxidosqualene cyclases from Tripterygium wilfordii. Plant Cell Reports, 2020, 39, 409-418.	2.8	20
41	Molecular cloning and functional characterization of multiple geranylgeranyl pyrophosphate synthases (ApGGPPS) from Andrographis paniculata. Plant Cell Reports, 2019, 38, 117-128.	2.8	19
42	De novo biosynthesis of liquiritin in Saccharomyces cerevisiae. Acta Pharmaceutica Sinica B, 2020, 10, 711-721.	5.7	19
43	A novel strategy to enhance terpenoids production using cambial meristematic cells of Tripterygium wilfordii Hook. f.. Plant Methods, 2019, 15, 129.	1.9	18
44	Melatonin increases leaf disease resistance and saponin biosynthesis in Panax notogiseng. Journal of Plant Physiology, 2021, 263, 153466.	1.6	18
45	Phylogeographic and phylogenetic analysis for Tripterygium species delimitation. Ecology and Evolution, 2017, 7, 8612-8623.	0.8	16
46	Overexpression and RNA interference of TwDXR regulate the accumulation of terpenoid active ingredients in Tripterygium wilfordii. Biotechnology Letters, 2018, 40, 419-425.	1.1	16
47	MiR-1271 Inhibits Cell Growth in Prostate Cancer by Targeting ERG. Pathology and Oncology Research, 2018, 24, 385-391.	0.9	16
48	Rapid discovery and functional characterization of diterpene synthases from basidiomycete fungi by genome mining. Fungal Genetics and Biology, 2019, 128, 36-42.	0.9	16
49	Asymmetric Synthesis of C1-Chiral THIQs with Imines in Isoquinoline Rings. Synthesis, 2020, 52, 3337-3355.	1.2	15
50	Functional characterization of NES and GES responsible for the biosynthesis of (E)-nerolidol and (E,E)-geranyllinalool in Tripterygium wilfordii. Scientific Reports, 2017, 7, 40851.	1.6	14
51	Î²-Lactamase production and antibiotic susceptibility pattern of Moraxella catarrhalis isolates collected from two county hospitals in China. BMC Microbiology, 2018, 18, 77.	1.3	14
52	Antibacterial triterpenoids from the leaves of Ilex hainanensis Merr.. Natural Product Research, 2019, 33, 2435-2439.	1.0	14
53	Online discovery of the molecular mechanism for directionally detoxification of Fuzi using real-time extractive electrospray ionization mass spectrometry. Journal of Ethnopharmacology, 2021, 277, 114216.	2.0	14
54	Extraction, Structures, Bioactivities and Structure-Function Analysis of the Polysaccharides From Safflower (Carthamus tinctorius L.). Frontiers in Pharmacology, 2021, 12, 767947.	1.6	14

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55	Cloning and functional characterization of an isopentenyl diphosphate isomerase gene from Tripterygium wilfordii. Biotechnology and Applied Biochemistry, 2016, 63, 863-869.	1.4	13
56	Molecular cloning and functional identification of a cDNA encoding 4-hydroxy-3-methylbut-2-enyl diphosphate reductase from Tripterygium wilfordii. Acta Pharmaceutica Sinica B, 2017, 7, 208-214.	5.7	13
57	A Novel Method for Automatic Identification of Breathing State. Scientific Reports, 2019, 9, 103.	1.6	13
58	Functional significance of post-myocardial infarction inflammation evaluated by 18F-fluorodeoxyglucose imaging in swine model. Journal of Nuclear Cardiology, 2020, 27, 519-531.	1.4	13
59	The expression of TwDXS in the MEP pathway specifically affects the accumulation of triptolide. Physiologia Plantarum, 2020, 169, 40-48.	2.6	13
60	The MVA pathway genes expressions and accumulation of celastrol in Tripterygium wilfordii suspension cells in response to methyl jasmonate treatment. Journal of Asian Natural Products Research, 2016, 18, 619-628.	0.7	12
61	A cycloartenol synthase from the steroidal saponin biosynthesis pathway of Paris polyphylla. Journal of Asian Natural Products Research, 2021, 23, 353-362.	0.7	12
62	Metabolic Engineering of Saccharomyces cerevisiae for High-Level Friedelin via Genetic Manipulation. Frontiers in Bioengineering and Biotechnology, 2022, 10, 805429.	2.0	12
63	Molecular cloning and functional identification of sterol C24-methyltransferase gene from Tripterygium wilfordii. Acta Pharmaceutica Sinica B, 2017, 7, 603-609.	5.7	11
64	The gibberellin 13-oxidase that specifically converts gibberellin A9 to A20 in Tripterygium wilfordii is a 2-oxoglutarate-dependent dioxygenase. Planta, 2019, 250, 1613-1620.	1.6	11
65	Value of 18F-fluorodeoxyglucose positron emission tomography/computed tomography in the evaluation of pulmonary artery activity in patients with Takayasuâ€™s arteritis. European Heart Journal Cardiovascular Imaging, 2021, 22, 541-550.	0.5	11
66	Biosynthesis of paclitaxel using synthetic biology. Phytochemistry Reviews, 2022, 21, 863-877.	3.1	11
67	Functional Analysis of the Isopentenyl Diphosphate Isomerase of Salvia miltiorrhiza via Color Complementation and RNA Interference. Molecules, 2015, 20, 20206-20218.	1.7	10
68	A multifunctional oxidosqualene cyclase from Tripterygium regelii that produces both Î±- and Î²-amyrin. RSC Advances, 2018, 8, 23516-23521.	1.7	10
69	Eudesmane-type sesquiterpene diols directly synthesized by a sesquiterpene cyclase in Tripterygium wilfordii. Biochemical Journal, 2018, 475, 2713-2725.	1.7	10
70	Analysis of the role of geranylgeranyl diphosphate synthase 8 from Tripterygium wilfordii in diterpenoids biosynthesis. Plant Science, 2019, 285, 184-192.	1.7	10
71	The Resonance and the Allium ureteral stents in the treatment of non-malignant refractory ureterostenosis. BMC Urology, 2021, 21, 53.	0.6	10
72	Probing the functions of friedelaneâ€type triterpene cyclases from four celastrolâ€producing plants. Plant Journal, 2022, 109, 555-567.	2.8	10

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73	Overexpression and RNAi-mediated downregulation of TwIDI regulates triptolide and celastrol accumulation in Tripterygium wilfordii. Gene, 2018, 679, 195-201.	1.0	9
74	A specific UDP-glucosyltransferase catalyzes the formation of triptophenolide glucoside from Tripterygium wilfordii Hook. f.. Phytochemistry, 2019, 166, 112062.	1.4	9
75	Functional characterization of three flavonoid glycosyltransferases from Andrographis paniculata. Royal Society Open Science, 2019, 6, 190150.	1.1	9
76	Key Glycosyltransferase Genes of Panax notoginseng: Identification and Engineering Yeast Construction of Rare Ginsenosides. ACS Synthetic Biology, 2022, 11, 2394-2404.	1.9	9
77	Cloning and functional analysis of two sterol-C24-methyltransferase 1 (SMT1) genes from Paris polyphylla. Journal of Asian Natural Products Research, 2018, 20, 595-604.	0.7	8
78	Risk factors for cholesterol polyp formation in the gallbladder are closely related to lipid metabolism. Lipids in Health and Disease, 2021, 20, 26.	1.2	8
79	Hypervirulent Klebsiella pneumoniae Infections in Pediatric Populations in Beijing (2017â€“2019). Pediatric Infectious Disease Journal, 2021, 40, 1059-1063.	1.1	8
80	Cytochrome P450 catalyses the 29-carboxyl group formation of celastrol. Phytochemistry, 2021, 190, 112868.	1.4	8
81	A cytochrome P450 CYP81AM1 from Tripterygium wilfordii catalyses the C-15 hydroxylation of dehydroabietic acid. Planta, 2021, 254, 95.	1.6	8
82	Cytochrome P450s in plant terpenoid biosynthesis: discovery, characterization and metabolic engineering. Critical Reviews in Biotechnology, 2023, 43, 1-21.	5.1	8
83	Desymmetrization Process by Mg(II)-Catalyzed Intramolecular Vinylogous Michael Reaction. Organic Letters, 2020, 22, 9229-9233.	2.4	7
84	Undifferentiated colonic neoplasm with SMARCA4 germline gene mutation and loss of SMARCA4 protein expression: a case report and literature review. Diagnostic Pathology, 2021, 16, 30.	0.9	7
85	Identification of traditional Chinese medicinal pipefish and exclusion of common adulterants by multiplex PCR based on 12S sequences of specific alleles. Mitochondrial DNA Part A: DNA Mapping, Sequencing, and Analysis, 2018, 29, 340-346.	0.7	6
86	Differential expression of the TwHMGS gene and its effect on triptolide biosynthesis in Tripterygium wilfordii. Chinese Journal of Natural Medicines, 2019, 17, 575-584.	0.7	6
87	Development and evaluation of a training model for paracentetic suprapubic cystostomy and catheterization. Clinics, 2019, 74, e435.	0.6	6
88	An integrated strategy to identify genes responsible for sesquiterpene biosynthesis in turmeric. Plant Molecular Biology, 2019, 101, 221-234.	2.0	5
89	Multiple cardiovascular involvements in BehÃ§etâ€™s disease: unique utility of 18F-FDG PET/CT in diagnosis and follow-up. European Journal of Nuclear Medicine and Molecular Imaging, 2019, 46, 2210-2211.	3.3	5
90	Molecular cloning and functional characterization of multiple ApOSCs from Andrographis paniculata. Chinese Journal of Natural Medicines, 2020, 18, 659-665.	0.7	5

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91	Benign giant-cell tumor of the common bile duct: A case report. World Journal of Gastroenterology, 2014, 20, 15448.	1.4	5
92	Investigating the Catalytic Activity of Glycosyltransferase on Quercetin from Tripterygium wilfordii. ACS Omega, 2020, 5, 1414-1421.	1.6	5
93	Diterpene synthases fromLeonurus japonicuselucidate epoxy-bridge formation of spiro-labdane diterpenoids. Plant Physiology, 2022, 189, 99-111.	2.3	5
94	Mechanistic analysis for the origin of diverse diterpenes in Tripterygium wilfordii. Acta Pharmaceutica Sinica B, 2022, 12, 2923-2933.	5.7	4
95	Functional characterization and substrate promiscuity of sesquiterpene synthases from Tripterygium wilfordii. International Journal of Biological Macromolecules, 2021, 185, 949-958.	3.6	3
96	Serotype distribution, antibiotic resistance patterns and molecular characteristics of serogroup 6 Streptococcus pneumoniae isolates collected from Chinese children before the introduction of PCV13. Journal of Global Antimicrobial Resistance, 2018, 14, 23-28.	0.9	2
97	Papillary Glioneuronal Tumor with an Excessive Angiomatous Component in an Elderly Man. Chinese Medical Journal, 2018, 131, 243-244.	0.9	2
98	Isolation and characterization of a glycosyltransferase with specific catalytic activity towards flavonoids from Tripterygium wilfordii. Journal of Asian Natural Products Research, 2020, 22, 537-546.	0.7	2
99	Identification of a flavonoid 7-O-glucosyltransferase from Andrographis paniculata. Journal of Asian Natural Products Research, 2020, 22, 279-286.	0.7	2
100	Correlation analysis of physicochemical properties with anti-inflammatory activity of Andrographis paniculata (Burm.f.) Nees based on HPLC-DAD, colorimeter and multivariate statistics: A comprehensive quality evaluation strategy. Journal of Pharmaceutical and Biomedical Analysis, 2022, 210, 114565.	1.4	2
101	Overexpression of TwSQS, TwSE, and TwOSC Regulates Celastrol Accumulation in Cambial Meristematic Cells and Dedifferentiated Cells. Frontiers in Plant Science, 0, 13, .	1.7	1
102	Probing the function of protein farnesyltransferase in Tripterygium wilfordii. Plant Cell Reports, 2019, 38, 211-220.	2.8	0
103	Genes functional identification and synthetic biology of natural products. Chinese Journal of Natural Medicines, 2020, 18, 641-642.	0.7	0
104	Metallic ureteral stent in restoring kidney function: Nine case reports. World Journal of Clinical Cases, 2020, 8, 2841-2848.	0.3	0