

Diverse compounds from pleuromutilin lead to a thioredoxin-dependent ferroptosis

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Recent Progress in Ferroptosis Inducers for Cancer Therapy. <i>Advanced Materials</i> , 2019, 31, e1904197.	11.1	938
3	Diverse engineering. <i>Nature Chemistry</i> , 2019, 11, 499-500.	6.6	3
4	Copper-catalyzed cascade click/nucleophilic substitution reaction to access fully substituted triazolyl-organosulfurs. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 9933-9941.	1.5	13
5	Recent achievements and current trajectories of diversity-oriented synthesis. <i>Current Opinion in Chemical Biology</i> , 2020, 56, 1-9.	2.8	67
6	Preventing Morphine-Seeking Behavior through the Re-Engineering of Vincamine's Biological Activity. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 5119-5138.	2.9	30
7	Implementation of permeation rules leads to a FabI inhibitor with activity against Gram-negative pathogens. <i>Nature Microbiology</i> , 2020, 5, 67-75.	5.9	87
8	Oxidative Damage and Antioxidant Defense in Ferroptosis. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 586578.	1.8	265
9	Emerging mechanisms and applications of ferroptosis in the treatment of resistant cancers. <i>Biomedicine and Pharmacotherapy</i> , 2020, 130, 110710.	2.5	48
10	Abnormal Ferroptosis in Myelodysplastic Syndrome. <i>Frontiers in Oncology</i> , 2020, 10, 1656.	1.3	18
11	Re-engineering natural products to engage new biological targets. <i>Natural Product Reports</i> , 2020, 37, 1395-1403.	5.2	38
12	Novel insights into ferroptosis: Implications for age-related diseases. <i>Theranostics</i> , 2020, 10, 11976-11997.	4.6	59
13	The Metabolic Underpinnings of Ferroptosis. <i>Cell Metabolism</i> , 2020, 32, 920-937.	7.2	590
14	Reactivity-Based Probe of the Iron(II)-Dependent Interactome Identifies New Cellular Modulators of Ferroptosis. <i>Journal of the American Chemical Society</i> , 2020, 142, 19085-19093.	6.6	32
15	Ferroptosis: machinery and regulation. <i>Autophagy</i> , 2021, 17, 2054-2081.	4.3	765
16	Thioredoxin and Glutaredoxin Systems as Potential Targets for the Development of New Treatments in Friedreich's Ataxia. <i>Antioxidants</i> , 2020, 9, 1257.	2.2	29
17	Electron-Accepting Micelles Deplete Reduced Nicotinamide Adenine Dinucleotide Phosphate and Impair Two Antioxidant Cascades for Ferroptosis-Induced Tumor Eradication. <i>ACS Nano</i> , 2020, 14, 14715-14730.	7.3	118
18	Pseudo-natural products and natural product-inspired methods in chemical biology and drug discovery. <i>Current Opinion in Chemical Biology</i> , 2020, 56, 111-118.	2.8	45
19	Induction of programmed necrosis: A novel anti-cancer strategy for natural compounds. , 2020, 214, 107593.		37

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20	Yohimbine as a Starting Point to Access Diverse Natural Product-Like Agents with Re-programmed Activities against Cancer-Relevant GPCR Targets. <i>Bioorganic and Medicinal Chemistry</i> , 2020, 28, 115546.	1.4	13
21	Target identification of natural medicine with chemical proteomics approach: probe synthesis, target fishing and protein identification. <i>Signal Transduction and Targeted Therapy</i> , 2020, 5, 72.	7.1	91
22	The Application of Ferroptosis in Diseases. <i>Pharmacological Research</i> , 2020, 159, 104919.	3.1	236
23	Induction of programmed necrosis by phytochemicals in colorectal cancer. , 2020, , 117-133.		0
24	Remarkable Potential of Zerumbone to Generate a Library with Six Natural Product-like Skeletons by Natural Material-Related Diversity-Oriented Synthesis. <i>Journal of Organic Chemistry</i> , 2020, 85, 8371-8386.	1.7	5
25	Inhibitory Effect and Mechanism of Action of Quercetin and Quercetin Diels-Alder anti-Dimer on Erastin-Induced Ferroptosis in Bone Marrow-Derived Mesenchymal Stem Cells. <i>Antioxidants</i> , 2020, 9, 205.	2.2	51
26	Re-Engineering of Yohimbine's Biological Activity through Ring Distortion: Identification and Structure-Activity Relationships of a New Class of Antiplasmodial Agents. <i>ACS Infectious Diseases</i> , 2020, 6, 159-167.	1.8	20
27	Investigating Nonapoptotic Cell Death Using Chemical Biology Approaches. <i>Cell Chemical Biology</i> , 2020, 27, 376-386.	2.5	17
28	Selenium: Tracing Another Essential Element of Ferroptotic Cell Death. <i>Cell Chemical Biology</i> , 2020, 27, 409-419.	2.5	66
29	Achieving Life through Death: Redox Biology of Lipid Peroxidation in Ferroptosis. <i>Cell Chemical Biology</i> , 2020, 27, 387-408.	2.5	144
30	Oxidants, Antioxidants and Thiol Redox Switches in the Control of Regulated Cell Death Pathways. <i>Antioxidants</i> , 2020, 9, 309.	2.2	68
31	Late-Stage Diversification of Natural Products. <i>ACS Central Science</i> , 2020, 6, 622-635.	5.3	203
32	Synthetic biology based construction of biological activity-related library of fungal decalin-containing diterpenoid pyrones. <i>Nature Communications</i> , 2020, 11, 1830.	5.8	64
33	Small molecules regulating reactive oxygen species homeostasis for cancer therapy. <i>Medicinal Research Reviews</i> , 2021, 41, 342-394.	5.0	107
34	Ferroptosis: molecular mechanisms and health implications. <i>Cell Research</i> , 2021, 31, 107-125.	5.7	1,406
35	Chemical synthesis of quillaic acid, the aglycone of QS-21. <i>Organic Chemistry Frontiers</i> , 2021, 8, 748-753.	2.3	4
36	Natural Molecules Targeting Thioredoxin System and Their Therapeutic Potential. <i>Antioxidants and Redox Signaling</i> , 2021, 34, 1083-1107.	2.5	49
37	Small Molecule Regulators of Ferroptosis. <i>Advances in Experimental Medicine and Biology</i> , 2021, 1301, 81-121.	0.8	3

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38	Nanoparticle-induced ferroptosis: detection methods, mechanisms and applications. <i>Nanoscale</i> , 2021, 13, 2266-2285.	2.8	88
39	Natural Products as Inducers of Non-Canonical Cell Death: A Weapon against Cancer. <i>Cancers</i> , 2021, 13, 304.	1.7	41
40	CtD strategy to construct stereochemically complex and structurally diverse compounds from griseofulvin. <i>Chemical Communications</i> , 2021, 57, 10755-10758.	2.2	4
41	Ferroptosis-Related Flavoproteins: Their Function and Stability. <i>International Journal of Molecular Sciences</i> , 2021, 22, 430.	1.8	11
42	Dysregulation of ferroptosis may involve in the development of non-small cell lung cancer in Xuanwei area. <i>Journal of Cellular and Molecular Medicine</i> , 2021, 25, 2872-2884.	1.6	22
43	Tannic Acid as a Natural Ferroptosis Inhibitor: Mechanisms and Beneficial Role of Galloylation. <i>ChemistrySelect</i> , 2021, 6, 1562-1569.	0.7	3
44	Ferroptosis: mechanisms and links with diseases. <i>Signal Transduction and Targeted Therapy</i> , 2021, 6, 49.	7.1	508
45	Chemoproteomic-enabled phenotypic screening. <i>Cell Chemical Biology</i> , 2021, 28, 371-393.	2.5	20
46	Anti-ferroptotic mechanism of IL4i1-mediated amino acid metabolism. <i>ELife</i> , 2021, 10, .	2.8	58
47	Synthetic Biology Based Construction of Fungal Diterpenoid Pyrone Library. <i>Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry</i> , 2021, 79, 322-332.	0.0	0
48	Ferroptosis: Biochemistry and Biology in Cancers. <i>Frontiers in Oncology</i> , 2021, 11, 579286.	1.3	39
49	Cprp ¹ An Unusual, Repetitive Protein Which Impacts Pleuromutilin Biosynthesis in the Basidiomycete <i>Clitopilus passeckerianus</i> . <i>Frontiers in Fungal Biology</i> , 2021, 2, .	0.9	1
50	Comprehensive Structure-Activity Profiling of Micheliolide and its Targeted Proteome in Leukemia Cells via Probe-Guided Late-Stage C-H Functionalization. <i>ACS Central Science</i> , 2021, 7, 841-857.	5.3	18
51	Evolutionary and functional analyses demonstrate conserved ferroptosis protection by Arabidopsis GPXs in mammalian cells. <i>FASEB Journal</i> , 2021, 35, e21550.	0.2	5
52	Carbene-Catalyzed Atroposelective Annulation and Desymmetrization of Urazoles. <i>Organic Letters</i> , 2021, 23, 3991-3996.	2.4	50
53	Limonin as a Starting Point for the Construction of Compounds with High Scaffold Diversity. <i>Angewandte Chemie</i> , 2021, 133, 16255-16264.	1.6	4
54	Symphony of nanomaterials and immunotherapy based on the cancer-immunity cycle. <i>Acta Pharmaceutica Sinica B</i> , 2022, 12, 107-134.	5.7	70
55	The role of regulated necrosis in endocrine diseases. <i>Nature Reviews Endocrinology</i> , 2021, 17, 497-510.	4.3	35

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56	Limonin as a Starting Point for the Construction of Compounds with High Scaffold Diversity. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16119-16128.	7.2	17
57	Mechanisms of Modulation of Ferroptosis and Its Role in Central Nervous System Diseases. <i>Frontiers in Pharmacology</i> , 2021, 12, 657033.	1.6	37
58	Regulation of ferroptosis by bioactive phytochemicals: Implications for medical nutritional therapy. <i>Pharmacological Research</i> , 2021, 168, 105580.	3.1	41
59	Ring Distortion of Vincamine Leads to the Identification of Re-Engineered Antiplasmodial Agents. <i>ACS Omega</i> , 2021, 6, 20455-20470.	1.6	4
60	Dysfunction of the key ferroptosis-surveilling systems hypersensitizes mice to tubular necrosis during acute kidney injury. <i>Nature Communications</i> , 2021, 12, 4402.	5.8	116
61	Design, synthesis, in vitro and in vivo evaluation against MRSA and molecular docking studies of novel pleuromutilin derivatives bearing 1, 3, 4-oxadiazole linker. <i>Bioorganic Chemistry</i> , 2021, 112, 104956.	2.0	15
62	Macrolide Diversification Reveals Broad Immunosuppressive Activity That Impairs the cGAS- ϵ STING Pathway. <i>Angewandte Chemie</i> , 2021, 133, 18882-18889.	1.6	0
64	Long-Term Dynamic Imaging of Cellular Processes Using an AIE Lipid Order Probe in the Dual-Color Mode. <i>Analytical Chemistry</i> , 2021, 93, 10272-10281.	3.2	21
65	Emerging mechanisms and targeted therapy of ferroptosis in cancer. <i>Molecular Therapy</i> , 2021, 29, 2185-2208.	3.7	134
66	Enantioselective synthesis of pyrro[3,4-c]quinoline pseudo-natural products. <i>Tetrahedron Letters</i> , 2021, 76, 153228.	0.7	6
67	Macrolide Diversification Reveals Broad Immunosuppressive Activity That Impairs the cGAS- ϵ STING Pathway. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 18734-18741.	7.2	5
68	Ferroptosis-Inhibitory Difference between Chebulagic Acid and Chebulinic Acid Indicates Beneficial Role of HHDP. <i>Molecules</i> , 2021, 26, 4300.	1.7	6
69	Lipid Metabolism Regulates Oxidative Stress and Ferroptosis in RAS-Driven Cancers: A Perspective on Cancer Progression and Therapy. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 706650.	1.6	32
70	Combination of Pseudo-Natural Product Design and Formal Natural Product Ring Distortion Yields Stereochemically and Biologically Diverse Pseudo-Sesquiterpenoid Alkaloids. <i>Angewandte Chemie</i> , 2021, 133, 21554-21565.	1.6	8
71	Combination of Pseudo-Natural Product Design and Formal Natural Product Ring Distortion Yields Stereochemically and Biologically Diverse Pseudo-Sesquiterpenoid Alkaloids. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 21384-21395.	7.2	25
72	Regulated lytic cell death in breast cancer. <i>Cell Biology International</i> , 2022, 46, 12-33.	1.4	9
73	Contemporary Techniques for Target Deconvolution and Mode of Action Elucidation. <i>RSC Drug Discovery Series</i> , 2020, , 83-103.	0.2	2
75	Pleuromutilin Inhibits Proliferation and Migration of A2780 and Caov-3 Ovarian Carcinoma Cells and Growth of Mouse A2780 Tumor Xenografts by Down-Regulation of pFAK2. <i>Medical Science Monitor</i> , 2020, 26, e920407.	0.5	2

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76	Targeting NRF2 to suppress ferroptosis in brain injury. <i>Histology and Histopathology</i> , 2021, 36, 383-397.	0.5	6
77	Privileged Biorenewable Secologanin-Based Diversity-Oriented Synthesis for Pseudo-Natural Alkaloids: Uncovering Novel Neuroprotective and Antimalarial Frameworks. <i>ChemSusChem</i> , 2021, 14, 5320-5327.	3.6	3
78	Emerging Roles of Energy Metabolism in Ferroptosis Regulation of Tumor Cells. <i>Advanced Science</i> , 2021, 8, e2100997.	5.6	105
79	Concise syntheses and anti-inflammatory effects of isocorniculatolide B and corniculatolide B and C. <i>Bioorganic Chemistry</i> , 2021, 116, 105398.	2.0	2
80	Efficient Synthesis of Marine Alkaloid Ageladine A and its Structural Modification for Exploring New Biological Activity. <i>Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry</i> , 2020, 78, 51-59.	0.0	2
81	Radiotherapy-Induced Digestive Injury: Diagnosis, Treatment and Mechanisms. <i>Frontiers in Oncology</i> , 2021, 11, 757973.	1.3	17
82	The mechanisms and therapeutic targets of ferroptosis in cancer. <i>Expert Opinion on Therapeutic Targets</i> , 2021, 25, 965-986.	1.5	18
83	Pharmacological Targeting of Ferroptosis in Cancer Treatment. <i>Current Cancer Drug Targets</i> , 2022, 22, 108-125.	0.8	7
84	Emerging Mechanisms and Disease Implications of Ferroptosis: Potential Applications of Natural Products. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 774957.	1.8	28
85	The multifaceted role of ferroptosis in liver disease. <i>Cell Death and Differentiation</i> , 2022, 29, 467-480.	5.0	214
86	A Ferroptosis-Related Gene Prognostic Index to Predict Temozolomide Sensitivity and Immune Checkpoint Inhibitor Response for Glioma. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 812422.	1.8	5
87	Nanodrug delivery systems for ferroptosis-based cancer therapy. <i>Journal of Controlled Release</i> , 2022, 344, 289-301.	4.8	25
88	Nucleotide biosynthesis links glutathione metabolism to ferroptosis sensitivity. <i>Life Science Alliance</i> , 2022, 5, e202101157.	1.3	26
89	Persister cancer cells: Iron addiction and vulnerability to ferroptosis. <i>Molecular Cell</i> , 2022, 82, 728-740.	4.5	92
90	High expression of the ferroptosis-associated MGST1 gene in relation to poor outcome and maladjusted immune cell infiltration in uterine corpus endometrial carcinoma. <i>Journal of Clinical Laboratory Analysis</i> , 2022, 36, e24317.	0.9	11
91	Recent Advances in Divergent Synthetic Strategies for Indole-Based Natural Product Libraries. <i>Molecules</i> , 2022, 27, 2171.	1.7	5
92	Inhibiting Erastin-Induced Ferroptotic Cell Death by Purine-Based Chelators. <i>ChemBioChem</i> , 2022, 23, .	1.3	1
93	Potential Role of APEX1 During Ferroptosis. <i>Frontiers in Oncology</i> , 2022, 12, 798304.	1.3	5

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94	Ferroptosis in hematological malignancies and its potential network with abnormal tumor metabolism. <i>Biomedicine and Pharmacotherapy</i> , 2022, 148, 112747.	2.5	23
95	Plasticity of Extrachromosomal and Intrachromosomal <i>BRAF</i> Amplifications in Overcoming Targeted Therapy Dosage Challenges. <i>Cancer Discovery</i> , 2022, 12, 1046-1069.	7.7	27
98	Ferroptosis and cancer immunotherapy. <i>Current Molecular Medicine</i> , 2022, 22, .	0.6	4
99	Targeting cellular energy metabolism-mediated ferroptosis by small molecule compounds for colorectal cancer therapy. <i>Journal of Drug Targeting</i> , 2022, 30, 819-832.	2.1	3
100	Polyamine-based thiols in pathogens. , 2022, , 555-584.		0
101	Thioredoxin Signaling Pathways in Cancer. <i>Antioxidants and Redox Signaling</i> , 0, , .	2.5	6
102	Relevance of Ferroptosis to Cardiotoxicity Caused by Anthracyclines: Mechanisms to Target Treatments. <i>Frontiers in Cardiovascular Medicine</i> , 0, 9, .	1.1	9
103	Target-Agnostic P-Glycoprotein Assessment Yields Strategies to Evade Efflux, Leading to a BRAF Inhibitor with Intracranial Efficacy. <i>Journal of the American Chemical Society</i> , 2022, 144, 12367-12380.	6.6	6
104	Tricyclic Aza-Andrographolide Derivatives from Late-Stage Hydroamination and Their Anti-human Coronavirus (Anti-HCoV) Activity. <i>ACS Omega</i> , 2022, 7, 24824-24837.	1.6	1
105	Ferroptosis: A Specific Vulnerability of RAS-Driven Cancers?. <i>Frontiers in Oncology</i> , 0, 12, .	1.3	7
106	Diabetic Ferroptosis and Pancreatic Cancer: Foe or Friend?. <i>Antioxidants and Redox Signaling</i> , 2022, 37, 1206-1221.	2.5	2
107	Quantitative reactive cysteinome profiling reveals a functional link between ferroptosis and proteasome-mediated degradation. <i>Cell Death and Differentiation</i> , 2023, 30, 125-136.	5.0	6
108	Discovery of a novel Pleuromutilin derivative as anti-IPF lead compound via high-throughput assay. <i>European Journal of Medicinal Chemistry</i> , 2022, 241, 114643.	2.6	6
109	Recent ring distortion reactions for diversifying complex natural products. <i>Natural Product Reports</i> , 2022, 39, 1970-1992.	5.2	9
110	Recent advances in small-molecule fluorescent probes for studying ferroptosis. <i>Chemical Society Reviews</i> , 2022, 51, 7752-7778.	18.7	47
111	Ferroptosis: Shedding Light on Mechanisms and Therapeutic Opportunities in Liver Diseases. <i>Cells</i> , 2022, 11, 3301.	1.8	9
112	Ferroptosis heterogeneity in triple-negative breast cancer reveals an innovative immunotherapy combination strategy. <i>Cell Metabolism</i> , 2023, 35, 84-100.e8.	7.2	90
113	Ferroptosis-related small-molecule compounds in cancer therapy: Strategies and applications. <i>European Journal of Medicinal Chemistry</i> , 2022, 244, 114861.	2.6	17

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114	Targeting lipid metabolism for ferroptotic cancer therapy. <i>Apoptosis: an International Journal on Programmed Cell Death</i> , 2023, 28, 81-107.	2.2	8
115	Non-classical ferroptosis inhibition by a small molecule targeting PHB2. <i>Nature Communications</i> , 2022, 13, .	5.8	14
116	Ferroptosis: From regulation of lipid peroxidation to the treatment of diseases. <i>Cell Biology and Toxicology</i> , 2023, 39, 827-851.	2.4	20
117	Discovery of Novel Polycyclic Phloroglucinols via an Improved One-Pot Method. <i>ACS Omega</i> , 2022, 7, 47174-47182.	1.6	0
118	SLC12A5 promotes hepatocellular carcinoma growth and ferroptosis resistance by inducing ER stress and cystine transport changes. <i>Cancer Medicine</i> , 2023, 12, 8526-8541.	1.3	3
119	Ferroptosis-modulating small molecules for targeting drug-resistant cancer: Challenges and opportunities in manipulating redox signaling. <i>Medicinal Research Reviews</i> , 2023, 43, 614-682.	5.0	20
120	Targeting critical pathways in ferroptosis and enhancing antitumor therapy of Platinum drugs for colorectal cancer. <i>Science Progress</i> , 2023, 106, 003685042211471.	1.0	2
121	Macrolide, lincosamide, glycopeptide, and other antibacterial antibiotics. , 2023, , 157-213.		1
122	Ferroptosis: Environmental causes, biological redox signaling responses, cancer and other health consequences. <i>Coordination Chemistry Reviews</i> , 2023, 480, 215024.	9.5	8
124	Development of axially chiral urazole scaffolds for antiplant virus applications against potato virus Y. <i>Pest Management Science</i> , 2023, 79, 2527-2538.	1.7	2
125	Role of ferroptosis in pregnancy related diseases and its therapeutic potential. <i>Frontiers in Cell and Developmental Biology</i> , 0, 11, .	1.8	3
126	Nature-Inspired Bioactive Compounds: A Promising Approach for Ferroptosis-Linked Human Diseases?. <i>Molecules</i> , 2023, 28, 2636.	1.7	7
127	Ferroptosis in acute leukemia. <i>Chinese Medical Journal</i> , 2023, 136, 886-898.	0.9	1
128	A Classic Photochemical Approach Inducing an Unexpected Rearrangement: Exploring the Photoreactivity of Pentacyclic Triterpenic Acids. <i>Journal of Natural Products</i> , 0, , .	1.5	0
134	Exploring Diversity through Dimerization in Natural Products by a Rational Tandem Mass-Based Molecular Network Strategy. <i>Organic Letters</i> , 2023, 25, 4016-4021.	2.4	1
141	Artificial Intelligence and Discovery of Microbial Natural Products. , 2023, , 37-78.		0