Frank Porreca

List of Publications by Year
in descending order

105 papers	4,868 citations	109264 35 h-index	110317 64 g-index
106 all docs	106 docs citations	106 times ranked	5194 citing authors

#	Article	IF	Citations
1	Reward and motivation in pain and pain relief. Nature Neuroscience, 2014, 17, 1304-1312.	7.1	370
2	Spinal and Supraspinal Mechanisms of Neuropathic Pain. Annals of the New York Academy of Sciences, 2000, 909, 12-24.	1.8	220
3	Triptanâ€induced latent sensitization: A possible basis for medication overuse headache. Annals of Neurology, 2010, 67, 325-337.	2.8	181
4	Nausea and Vomiting Side Effects with Opioid Analgesics during Treatment of Chronic Pain: Mechanisms, Implications, and Management Options. Pain Medicine, 2009, 10, 654-662.	0.9	175
5	Brain Circuits Encoding Reward from Pain Relief. Trends in Neurosciences, 2015, 38, 741-750.	4.2	174
6	The ACTTION-American Pain Society Pain Taxonomy (AAPT): An Evidence-Based and Multidimensional Approach to Classifying Chronic Pain Conditions. Journal of Pain, 2014, 15, 241-249.	0.7	159
7	Endogenous Opioid Activity in the Anterior Cingulate Cortex Is Required for Relief of Pain. Journal of Neuroscience, 2015, 35, 7264-7271.	1.7	154
8	Pathophysiology, prevention, and treatment of medication overuse headache. Lancet Neurology, The, 2019, 18, 891-902.	4.9	151
9	Post-traumatic headache: epidemiology and pathophysiological insights. Nature Reviews Neurology, 2019, 15, 607-617.	4.9	131
10	Endogenous adenosine A3 receptor activation selectively alleviates persistent pain states. Brain, 2015, 138, 28-35.	3.7	120
11	Reward, motivation, and emotion of pain and its relief. Pain, 2017, 158, S43-S49.	2.0	119
12	Amygdala, neuropeptides, and chronic pain-related affective behaviors. Neuropharmacology, 2020, 170, 108052.	2.0	109
13	Development of delta opioid peptides as nonaddicting analgesics. Pharmaceutical Research, 1991, 08, 1-8.	1.7	105
14	Lost but making progressâ€"Where will new analgesic drugs come from?. Science Translational Medicine, 2014, 6, 249sr3.	5.8	102
15	Mechanisms of craniofacial pain. Cephalalgia, 2017, 37, 613-626.	1.8	101
16	Kappa Opioid Receptor Distribution and Function in Primary Afferents. Neuron, 2018, 99, 1274-1288.e6.	3.8	100
17	The Jak/STAT pathway: A focus on pain in rheumatoid arthritis. Seminars in Arthritis and Rheumatism, 2021, 51, 278-284.	1.6	97
18	Long-lasting antinociceptive effects of green light in acute and chronic pain in rats. Pain, 2017, 158, 347-360.	2.0	81

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19	Central Sensitization and Neuropathic Features of Ongoing Pain inÂa Rat Model of Advanced Osteoarthritis. Journal of Pain, 2016, 17, 374-382.	0.7	75
20	Kappa opioid signaling in the central nucleus of the amygdala promotes disinhibition and aversiveness of chronic neuropathic pain. Pain, 2019, 160, 824-832.	2.0	75
21	Multiple sites and actions of gabapentin-induced relief of ongoing experimental neuropathic pain. Pain, 2017, 158, 2386-2395.	2.0	74
22	Conformational restriction of Tyr and Phe side chains in opioid peptides: Information about preferred and bioactive side-chain topology. , 1996, 38, 1-12.		73
23	Kappa opioid receptor antagonists: A possible new class of therapeutics for migraine prevention. Cephalalgia, 2017, 37, 780-794.	1.8	70
24	De Novo Design, Synthesis, and Biological Activities of High-Affinity and Selective Non-Peptide Agonists of the Î´-Opioid Receptor. Journal of Medicinal Chemistry, 1998, 41, 4767-4776.	2.9	67
25	Positive emotions and brain reward circuits in chronic pain. Journal of Comparative Neurology, 2016, 524, 1646-1652.	0.9	67
26	CGRP-dependent and independent mechanisms of acute and persistent post-traumatic headache following mild traumatic brain injury in mice. Cephalalgia, 2019, 39, 1762-1775.	1.8	66
27	Disease modification of breast cancerâ€“induced bone remodeling by cannabinoid 2 receptor agonists. Journal of Bone and Mineral Research, 2013, 28, 92-107.	3.1	64
28	Activation of ventral tegmental area dopaminergic neurons reverses pathological allodynia resulting from nerve injury or bone cancer. Molecular Pain, 2018, 14, 174480691875640.	1.0	57
29	(S)-lacosamide inhibition of CRMP2 phosphorylation reduces postoperative and neuropathic pain behaviors through distinct classes of sensory neurons identified by constellation pharmacology. Pain, 2016, 157, 1448-1463.	2.0	54
30	Nanoparticulate peptide delivery exclusively to the brain produces tolerance free analgesia. Journal of Controlled Release, 2018, 270, 135-144.	4.8	51
31	Ubrogepant does not induce latent sensitization in a preclinical model of medication overuse headache. Cephalalgia, 2020, 40, 892-902.	1.8	47
32	Morphine effects within the rodent anterior cingulate cortex and rostral ventromedial medulla reveal separable modulation of affective and sensory qualities of acute or chronic pain. Pain, 2018, 159, 2512-2521.	2.0	46
33	Kappa opioid signaling in the right central amygdala causes hind paw specific loss of diffuse noxious inhibitory controls in experimental neuropathic pain. Pain, 2019, 160, 1614-1621.	2.0	45
34	Cyclic Enkephalin Analogues with Exceptional Potency and Selectivity for Î´-Opioid Receptors1. Journal of Medicinal Chemistry, 1997, 40, 3957-3962.	2.9	42
35	Substance P and Inflammatory Pain: Getting It Wrong and Right Simultaneously. Neuron, 2019, 101, 353-355.	3.8	42
36	Synthesis and biological activity of the first cyclic biphalin analogues. Bioorganic and Medicinal Chemistry Letters, 2006, 16, 367-372.	1.0	39

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37	Cognition in the Chronic Pain Experience: Preclinical Insights. Trends in Cognitive Sciences, 2021, 25, 365-376.	4.0	38
38	Hedonic and motivational responses to food reward are unchanged in rats with neuropathic pain. Pain, 2016, 157, 2731-2738.	2.0	38
39	Recent Advances in the Realm of Allosteric Modulators for Opioid Receptors for Future Therapeutics. ACS Chemical Neuroscience, 2017, 8, 1147-1158.	1.7	37
40	Design and Synthesis of a Novel and Selective Kappa Opioid Receptor (KOR) Antagonist (BTRX-335140). Journal of Medicinal Chemistry, 2019, 62, 1761-1780.	2.9	35
41	Selective modulation of tonic aversive qualities of neuropathic pain by morphine in the central nucleus of the amygdala requires endogenous opioid signaling in the anterior cingulate cortex. Pain, 2020, 161, 609-618.	2.0	34
42	Syntheses, opioid binding affinities, and potencies of dynorphin A analogues substituted in positions 1, 6, 7, 8 and 10. International Journal of Peptide and Protein Research, 1993, 42, 411-419.	0.1	32
43	Effects of Modifications of Residues in Position 3 of Dynorphin A(1â^'11)-NH2on Îº Receptor Selectivity and Potency. Journal of Medicinal Chemistry, 1996, 39, 2456-2460.	2.9	31
44	Design, Synthesis, and Biological Activities of Cyclic Lactam Peptide Analogues of Dynorphin A(1â^'11)-NH21. Journal of Medicinal Chemistry, 1996, 39, 1136-1141.	2.9	31
45	Anatomy and immunochemical characterization of the non-arterial peptidergic diffuse dural innervation of the rat and Rhesus monkey: Implications for functional regulation and treatment in migraine. Cephalalgia, 2017, 37, 1350-1372.	1.8	31
46	New potent biphalin analogues containing p-fluoro-l-phenylalanine at the 4,4â€² positions and non-hydrazine linkers. Amino Acids, 2011, 40, 1503-1511.	1.2	30
47	Novel Cyclic Biphalin Analogue with Improved Antinociceptive Properties. ACS Medicinal Chemistry Letters, 2014, 5, 1032-1036.	1.3	30
48	Exploring the Structureâ^'Activity Relationships of [1-(4-tert-Butyl-3â€˜-hydroxy)benzhydryl-4-benzylpiperazine] (SL-3111), A High-Affinity and Selective Î´-Opioid Receptor Nonpeptide Agonist Ligandâ€. Journal of Medicinal Chemistry, 1999, 42, 5359-5368.	2.9	29
49	Evaluation of green light exposure on headache frequency and quality of life in migraine patients: A preliminary one-way cross-over clinical trial. Cephalalgia, 2021, 41, 135-147.	1.8	29
50	?-Azido acids for direct use in solid-phase peptide synthesis. Journal of Peptide Science, 2000, 6, 594-602.	0.8	28
51	Synthesis and biological evaluation of compact, conformationally constrained bifunctional opioid agonist â€“ Neurokinin-1 antagonist peptidomimetics. European Journal of Medicinal Chemistry, 2015, 92, 64-77.	2.6	27
52	Decreased dopaminergic inhibition of pyramidal neurons in anterior cingulate cortex maintains chronic neuropathic pain. Cell Reports, 2021, 37, 109933.	2.9	27
53	Impact of chronic migraine attacks and their severity on the endogenous Î¼-opioid neurotransmission in the limbic system. NeuroImage: Clinical, 2019, 23, 101905.	1.4	26
54	Sustained exposure to acute migraine medications combined with repeated noxious stimulation dysregulates descending pain modulatory circuits: Relevance to medication overuse headache. Cephalalgia, 2019, 39, 617-625.	1.8	26

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55	Green Light Exposure Improves Pain and Quality of Life in Fibromyalgia Patients: A Preliminary One-Way Crossover Clinical Trial. Pain Medicine, 2021, 22, 118-130.	0.9	26
56	Peptide Targeting and Delivery across the Bloodâ˜'Brain Barrier Utilizing Synthetic Triglyceride Esters:Â Design, Synthesis, and Bioactivity. Bioconjugate Chemistry, 1997, 8, 434-441.	1.8	25
57	Orphanin-FQ/nociceptin: Lack of antinociceptive, hyperalgesic or allodynic effects in acute thermal or mechanical tests following intracerebroventricular or intrathecal administration to mice or rats. European Journal of Pain, 1998, 2, 267-278.	1.4	25
58	Synthesis and biological evaluation of new biphalin analogues with non-hydrazine linkers. Bioorganic and Medicinal Chemistry Letters, 2005, 15, 2471-2475.	1.0	25
59	An Emerging Role for Prolactin in Female-Selective Pain. Trends in Neurosciences, 2020, 43, 635-648.	4.2	25
60	Kappa opioid receptor activation in the amygdala disinhibits CRF neurons to generate pain-like behaviors. Neuropharmacology, 2021, 185, 108456.	2.0	25
61	Efficacy of (S)-lacosamide in preclinical models of cephalic pain. Pain Reports, 2016, 1, e565.	1.4	24
62	Retrovirus-Mediated Expression of an Artificial Î²-Endorphin Precursor in Primary Fibroblasts. Journal of Neurochemistry, 2002, 64, 475-481.	2.1	23
63	Selective deficiencies in descending inhibitory modulation in neuropathic rats: implications for enhancing noradrenergic tone. Pain, 2018, 159, 1887-1899.	2.0	23
64	Interaction of ?-funaltrexamine with [3H]cycloFOXY binding in rat brain: Further evidence that ?-FNA alkylates the opioid receptor complex. Synapse, 1991, 8, 86-99.	0.6	22
65	A novel, injury-free rodent model of vulnerability for assessment of acute and preventive therapies reveals temporal contributions of CGRP-receptor activation in migraine-like pain. Cephalalgia, 2021, 41, 305-317.	1.8	21
66	Characterization and preclinical evaluation of a protease activated receptor 2 (PAR2) monoclonal antibody as a preventive therapy for migraine. Cephalalgia, 2020, 40, 1535-1550.	1.8	17
67	CGRP monoclonal antibody prevents the loss of diffuse noxious inhibitory controls (DNIC) in a mouse model of post-traumatic headache. Cephalalgia, 2021, 41, 749-759.	1.8	17
68	Introducing descending control of nociception: a measure of diffuse noxious inhibitory controls in conscious animals. Pain, 2021, 162, 1957-1959.	2.0	17
69	Discovery of Novel Multifunctional Ligands with Î¼/Î´ Opioid Agonist/Neurokinin-1 (NK1) Antagonist Activities for the Treatment of Pain. Journal of Medicinal Chemistry, 2015, 58, 8573-8583.	2.9	16
70	Synthesis and biological properties of Î²â€MePhe³ analogues of deltorphin I and dermenkephalin: influence of biased X¹ of Phe³ residues on peptide recognition for Îâ€opioid receptors. Chemical Biology and Drug Design, 1997, 50, 48-54.	1.2	15
71	Development and Characterization of An Injury-free Model of Functional Pain in Rats by Exposure to Red Light. Journal of Pain, 2019, 20, 1293-1306.	0.7	15
72	Cannabinoids induce latent sensitization in a preclinical model of medication overuse headache. Cephalalgia, 2020, 40, 68-78.	1.8	15

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73	Discovery of tripeptide-derived multifunctional ligands possessing delta/mu opioid receptor agonist and neurokinin 1 receptor antagonist activities. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 3716-3720.	1.0	14
74	A prolactin-dependent sexually dimorphic mechanism of migraine chronification. Cephalalgia, 2022, 42, 197-208.	1.8	14
75	Relief of neuropathic pain by cell-specific manipulation of nucleus accumbens dopamine D1- and D2-receptor-expressing neurons. Molecular Brain, 2022, 15, 10.	1.3	14
76	The combination of the opioid glycopeptide MMP-2200 and a NMDA receptor antagonist reduced l-DOPA-induced dyskinesia and MMP-2200 by itself reduced dopamine receptor 2-like agonist-induced dyskinesia. Neuropharmacology, 2018, 141, 260-271.	2.0	13
77	Opioid peptide receptor studies. 7. The methylfentanyl congener RTI-4614-4 and its four enantiomers bind to different domains of the rat ? opioid receptor. Synapse, 1998, 28, 117-124.	0.6	12
78	Extracellular N-acetylaspartylglutamate released in the nucleus accumbens modulates the pain sensation: Analysis using a microdialysis/mass spectrometry integrated system. Molecular Pain, 2018, 14, 174480691875493.	1.0	12
79	Sexual dimorphism in functional pain syndromes. Science Translational Medicine, 2021, 13, eabj7180.	5.8	12
80	Structureâ€“activity relationships of non-opioid [des-Arg7]-dynorphin A analogues for bradykinin receptors. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 4976-4979.	1.0	11
81	Modification of amphipathic non-opioid dynorphin A analogues for rat brain bradykinin receptors. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 30-33.	1.0	11
82	Structureâ€“Activity Relationships of [des-Arg⁷]Dynorphin A Analogues at the Î¹ Opioid Receptor. Journal of Medicinal Chemistry, 2016, 59, 10291-10298.	2.9	11
83	A new hypothesis linking oxytocin to menstrual migraine. Headache, 2021, 61, 1051-1059.	1.8	11
84	Design and synthesis of novel bivalent ligands (MOR and DOR) by conjugation of enkephalin analogues with 4-anilidopiperidine derivatives. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 4683-4688.	1.0	10
85	Activation of dura-sensitive trigeminal neurons and increased c-Fos protein induced by morphine withdrawal in the rostral ventromedial medulla. Cephalalgia, 2017, 37, 407-417.	1.8	10
86	Delta opioid receptor selective ligands; DPLPEâ€deltorphin chimeric peptide analogues^{â€}. International Journal of Peptide and Protein Research, 1994, 44, 80-84.	0.1	8
87	Chronic pain recruits hypothalamic dynorphin/kappa opioid receptor signalling to promote wakefulness and vigilance. Brain, 2023, 146, 1186-1199.	3.7	8
88	Discovery of Stable Non-opioid Dynorphin A Analogues Interacting at the Bradykinin Receptors for the Treatment of Neuropathic Pain. ACS Chemical Neuroscience, 2016, 7, 1746-1752.	1.7	7
89	Cyclic biphalin analogues with a novel linker lead to potent agonist activities at mu, delta, and kappa opioid receptors. Bioorganic and Medicinal Chemistry, 2018, 26, 3664-3667.	1.4	6
90	Inhibition of experimental visceral pain in rodents by cebranopadol. Behavioural Pharmacology, 2019, 30, 320-326.	0.8	6

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91	Preclinical Assessment of the Analgesic Pharmacology of NKTR-181 in Rodents. Cellular and Molecular Neurobiology, 2021, 41, 949-960.	1.7	6
92	Cyclic non-opioid dynorphin A analogues for the bradykinin receptors. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 5513-5516.	1.0	5
93	Multifunctional Enkephalin Analogs with a New Biological Profile: MOR/DOR Agonism and KOR Antagonism. Biomedicines, 2021, 9, 625.	1.4	5
94	Chronic Pain Produces Reversible Memory Deficits That Depend on Task Difficulty in Rats. Journal of Pain, 2021, 22, 1467-1476.	0.7	5
95	Design, synthesis and biological evaluation of multifunctional ligands targeting opioid and bradykinin 2 receptors. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 4148-4152.	1.0	4
96	Chiral Effect of a Phe Residue in Position 3 of the Dmt¹-<scp>l</scp>(or) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (<sc Letters, 2013, 4, 656-659.	1.3	3
97	Preclinical assessment of onabotulinumtoxinA for the treatment of mild traumatic brain injury-related acute and persistent post-traumatic headache. Cephalalgia, 2022, , 033310242210998.	1.8	3
98	Discovery of 5-substituted tetrahydronaphthalen-2yl-methyl with N-phenyl-N-(piperidin-4-yl)propionamide derivatives as potent opioid receptor ligands. Bioorganic and Medicinal Chemistry, 2015, 23, 6185-6194.	1.4	2
99	Various modifications of the amphipathic dynorphin <scp>A</scp> pharmacophore for rat brain bradykinin receptors. Chemical Biology and Drug Design, 2016, 88, 615-619.	1.5	2
100	The opioid crisis and â€¦ reconsidering the use of drugs that affect body temperature. Temperature, 2018, 5, 1-3.	1.6	2
101	Blockade of non-opioid excitatory effects of spinal Dynorphin A at bradykinin receptors. Receptors & Clinical Investigation, 2015, 2, .	0.9	2
102	C-terminal modified Enkephalin-like tetrapeptides with enhanced affinities at the kappa opioid receptor and monoamine transporters. Bioorganic and Medicinal Chemistry, 2021, 51, 116509.	1.4	1
103	Opioid analgesics pass the acid test. Lancet, The, 2019, 393, 1579-1581.	6.3	0
104	The development of bifunctional ligands as novel therapeutics for chronic pain (1061.5). FASEB Journal, 2014, 28, 1061.5.	0.2	0
105	Engagement of kappa opioid system in the right amygdala diminishes diffuse noxious inhibitory controls (DNIC). Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, PO3-2-19.	0.0	0