Naweed I Syed

List of Publications by Year in descending order

91 papers	3,379 citations	172457 29 h-index	155660 55 g-index
93 all docs	93 docs citations	93 times ranked	2544 citing authors

#	Article	IF	Citations
1	Spatiotemporal Patterns of Menin Localization in Developing Murine Brain: Co-Expression with the Elements of Cholinergic Synaptic Machinery. Cells, 2021, 10, 1215.	4.1	3
2	A tuned gelatin methacryloyl (GelMA) hydrogel facilitates myelination of dorsal root ganglia neurons in vitro. Materials Science and Engineering C, 2021, 126, 112131.	7.3	15
3	Three dimensional microelectrodes enable high signal and spatial resolution for neural seizure recordings in brain slices and freely behaving animals. Scientific Reports, 2021, 11, 21952.	3.3	4
4	Neuronal Menin Overexpression Rescues Learning and Memory Phenotype in CA1-Specific Î±7 nAChRs KD Mice. Cells, 2021, 10, 3286.	4.1	9
5	Taurine Promotes Neurite Outgrowth and Synapse Development of Both Vertebrate and Invertebrate Central Neurons. Frontiers in Synaptic Neuroscience, 2020, 12, 29.	2.5	21
6	Neurotrophic factors and target-specific retrograde signaling interactions define the specificity of classical and neuropeptide cotransmitter release at identified Lymnaea synapses. Scientific Reports, 2020, 10, 13526.	3.3	4
7	Linear oblique craniectomy: A novel method of minimally invasive subdural grid insertion. Clinical and Translational Neuroscience, 2020, 4, 2514183X2097308.	0.9	0
8	Anesthetics: from modes of action to unconsciousness and neurotoxicity. Journal of Neurophysiology, 2019, 122, 760-787.	1.8	27
9	Uncovering the Cellular and Molecular Mechanisms of Synapse Formation and Functional Specificity Using Central Neurons of <i>Lymnaea stagnalis</i>. ACS Chemical Neuroscience, 2018, 9, 1928-1938.	3.5	6
10	A Novel Approach to Primary Cell Culture for Octopus vulgaris Neurons. Frontiers in Physiology, 2018, 9, 220.	2.8	11
11	General anesthetics and cytotoxicity: possible implications for brain health. Drug and Chemical Toxicology, 2017, 40, 241-249.	2.3	18
12	Tumor suppressor menin is required for subunit-specific nAChR Î±5 transcription and nAChR-dependent presynaptic facilitation in cultured mouse hippocampal neurons. Scientific Reports, 2017, 7, 1768.	3.3	11
13	Mechanisms of Anesthetic Action and Neurotoxicity: Lessons from Molluscs. Frontiers in Physiology, 2017, 8, 1138.	2.8	14
14	The Mock Academic Faculty Position Competition: A Pilot Professional and Career Development Opportunity for Postdoctoral Fellows. Academic Medicine, 2016, 91, 1661-1665.	1.6	8
15	A novel bio-mimicking, planar nano-edge microelectrode enables enhanced long-term neural recording. Scientific Reports, 2016, 6, 34553.	3.3	15
16	Two proteolytic fragments of menin coordinate the nuclear transcription and postsynaptic clustering of neurotransmitter receptors during synaptogenesis between Lymnaea neurons. Scientific Reports, 2016, 6, 31779.	3.3	14
17	The mitochondrial division inhibitor Mdivi-1 rescues mammalian neurons from anesthetic-induced cytotoxicity. Molecular Brain, 2016, 9, 35.	2.6	38
18	Graded hypoxia acts through a network of distributed peripheral oxygen chemoreceptors to produce changes in respiratory behaviour and plasticity. European Journal of Neuroscience, 2015, 42, 1858-1871.	2.6	3

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19	Trophic Factor-Induced Activity â€˜Signatureâ€™ Regulates the Functional Expression of Postsynaptic Excitatory Acetylcholine Receptors Required for Synaptogenesis. Scientific Reports, 2015, 5, 9523.	3.3	10
20	Effect of planar microelectrode geometry on neuron stimulation: Finite element modeling and experimental validation of the efficient electrode shape. Journal of Neuroscience Methods, 2015, 248, 51-58.	2.5	14
21	Menin: A Tumor Suppressor That Mediates Postsynaptic Receptor Expression and Synaptogenesis between Central Neurons of Lymnaea stagnalis. PLoS ONE, 2014, 9, e111103.	2.5	14
22	Neuronal Somata and Extrasomal Compartments Play Distinct Roles during Synapse Formation between Lymnaea Neurons. Journal of Neuroscience, 2014, 34, 11304-11315.	3.6	7
23	Silver nanoparticles (AgNPs) cause degeneration of cytoskeleton and disrupt synaptic machinery of cultured cortical neurons. Molecular Brain, 2013, 6, 29.	2.6	143
24	A planar microelectrode array for simultaneous detection of electrically evoked dopamine release from distinct locations of a single isolated neuron. Analyst, The, 2013, 138, 2833.	3.5	7
25	Synaptic Metaplasticity Underlies Tetanic Potentiation in Lymnaea: A Novel Paradigm. PLoS ONE, 2013, 8, e78056.	2.5	2
26	Control of Breathing in Invertebrate Model Systems. , 2012, 2, 1745-1766.		5
27	Culturing and Electrophysiology of Cells on NRCC Patch-clamp Chips. Journal of Visualized Experiments, 2012, , .	0.3	3
28	A PVAc-Based Benzophenone-8 Filter as an Alternative to Commercially Available Dichroic Filters for Monitoring Calcium Activity in Live Neurons via Fura-2 AM. IEEE Photonics Journal, 2012, 4, 1004-1012.	2.0	8
29	Molluscan neurons in culture: shedding light on synapse formation and plasticity. Journal of Molecular Histology, 2012, 43, 383-399.	2.2	14
30	Lidocaine treatment during synapse reformation periods permanently inhibits NGF-induced excitation in an identified reconstructed synapse of Lymnaea stagnalis. Journal of Anesthesia, 2012, 26, 45-53.	1.7	19
31	Neuronal Mechanisms of Oxygen Chemoreception: An Invertebrate Perspective. Advances in Experimental Medicine and Biology, 2012, 758, 7-17.	1.6	4
32	Recordings of cultured neurons and synaptic activity using patch-clamp chips. Journal of Neural Engineering, 2011, 8, 034002.	3.5	16
33	From Understanding Cellular Function to Novel Drug Discovery: The Role of Planar Patch-Clamp Array Chip Technology. Frontiers in Pharmacology, 2011, 2, 51.	3.5	23
34	The antidepressant fluoxetine but not citalopram suppresses synapse formation and synaptic transmission between <i>Lymnaea</i> neurons by perturbing presynaptic and postsynaptic machinery. European Journal of Neuroscience, 2011, 34, 221-234.	2.6	11
35	A novel form of presynaptic CaMKII-dependent short-term potentiation between Lymnaea neurons. European Journal of Neuroscience, 2011, 34, 569-577.	2.6	16
36	High-fidelity patch-clamp recordings from neurons cultured on a polymer microchip. Biomedical Microdevices, 2010, 12, 977-985.	2.8	19

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37	A novel silicon patchâ€clamp chip permits highâ€fidelity recording of ion channel activity from functionally defined neurons. Biotechnology and Bioengineering, 2010, 107, 593-600.	3.3	24
38	Antidepressant fluoxetine suppresses neuronal growth from both vertebrate and invertebrate neurons and perturbs synapse formation between <i>Lymnaea</i> neurons. European Journal of Neuroscience, 2010, 31, 994-1005.	2.6	24
39	A novel approach reveals temporal patterns of synaptogenesis between the isolated growth cones of <i>Lymnaea</i> neurons. European Journal of Neuroscience, 2010, 32, 1442-1451.	2.6	2
40	Quercetin Targets Cysteine String Protein (CSPÎ±) and Impairs Synaptic Transmission. PLoS ONE, 2010, 5, e11045.	2.5	25
41	Trophic Factor-Induced Intracellular Calcium Oscillations Are Required for the Expression of Postsynaptic Acetylcholine Receptors during Synapse Formation between Lymnaea Neurons. Journal of Neuroscience, 2009, 29, 2167-2176.	3.6	22
42	Postsynaptic expression of an epidermal growth factor receptor regulates cholinergic synapse formation between identified molluscan neurons. European Journal of Neuroscience, 2008, 27, 2043-2056.	2.6	14
43	Peripheral oxygen-sensing cells directly modulate the output of an identified respiratory central pattern generating neuron. European Journal of Neuroscience, 2007, 25, 3537-3550.	2.6	15
44	In Vitro Characterization of L-Type Calcium Channels and Their Contribution to Firing Behavior in Invertebrate Respiratory Neurons. Journal of Neurophysiology, 2006, 95, 42-52.	1.8	36
45	An identified central pattern-generating neuron co-ordinates sensory-motor components of respiratory behavior inLymnaea. European Journal of Neuroscience, 2006, 23, 94-104.	2.6	27
46	Ryanodine receptor-transmitter release site coupling increases quantal size in a synapse-specific manner. European Journal of Neuroscience, 2006, 24, 1591-1605.	2.6	10
47	Local Synthesis of Actin-Binding Protein Â-Thymosin Regulates Neurite Outgrowth. Journal of Neuroscience, 2006, 26, 152-157.	3.6	75
48	Neuronal networks and synaptic plasticity: understanding complex system dynamics by interfacing neurons with silicon technologies. Journal of Experimental Biology, 2006, 209, 2312-2319.	1.7	24
49	Peptidomics of a Single Identified Neuron Reveals Diversity of Multiple Neuropeptides with Convergent Actions on Cellular Excitability. Journal of Neuroscience, 2006, 26, 518-529.	3.6	39
50	Identification and Functional Expression of a Family of Nicotinic Acetylcholine Receptor Subunits in the Central Nervous System of the Mollusc Lymnaea stagnalis. Journal of Biological Chemistry, 2006, 281, 1680-1691.	3.4	59
51	Synapse Formation and Plasticity: The Roles of Local Protein Synthesis. Neuroscientist, 2005, 11, 228-237.	3.5	15
52	Neuron-Semiconductor Chip with Chemical Synapse between Identified Neurons. Physical Review Letters, 2004, 92, 038102.	7.8	60
53	Uncoupling of Calcium Channel Î±1 and Î² Subunits in Developing Neurons. Journal of Biological Chemistry, 2004, 279, 41157-41167.	3.4	23
54	Differential Proteomics Reveals Multiple Components in Retrogradely Transported Axoplasm After Nerve Injury. Molecular and Cellular Proteomics, 2004, 3, 510-520.	3.8	54

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55	Transplantation and restoration of functional synapses between an identified neuron and its targets in the intact brain ofLymnaea stagnalis. Synapse, 2004, 51, 186-193.	1.2	8
56	Neurotrophic activities of trk receptors conserved over 600 million years of evolution. Journal of Neurobiology, 2004, 60, 12-20.	3.6	28
57	Structure and Function of AChBP, Homologue of the Ligand-Binding Domain of the Nicotinic Acetylcholine Receptor. Annals of the New York Academy of Sciences, 2003, 998, 81-92.	3.8	54
58	Synaptogenesis in the CNS: An Odyssey from Wiring Together to Firing Together. Journal of Physiology, 2003, 552, 1-11.	2.9	62
59	Calcium Channel Structural Determinants of Synaptic Transmission between Identified Invertebrate Neurons. Journal of Biological Chemistry, 2003, 278, 4258-4267.	3.4	88
60	Synapse Formation Between Isolated Axons Requires Presynaptic Soma and Redistribution of Postsynaptic AChRs. Journal of Neurophysiology, 2003, 89, 2611-2619.	1.8	21
61	Long-Term Memory Survives Nerve Injury and the Subsequent Regeneration Process. Learning and Memory, 2003, 10, 44-54.	1.3	29
62	Anesthetic Treatment Blocks Synaptogenesis But Not Neuronal Regeneration of Cultured Lymnaea Neurons. Journal of Neurophysiology, 2003, 90, 2232-2239.	1.8	35
63	Electrophysiological Differences in the CPG Aerial Respiratory Behavior Between Juvenile and Adult Lymnaea. Journal of Neurophysiology, 2003, 90, 983-992.	1.8	57
64	Synapse Number and Synaptic Efficacy Are Regulated by Presynaptic cAMP and Protein Kinase A. Journal of Neuroscience, 2003, 23, 4146-4155.	3.6	25
65	Trophic Factor-Induced Excitatory Synaptogenesis Involves Postsynaptic Modulation of Nicotinic Acetylcholine Receptors. Journal of Neuroscience, 2002, 22, 505-514.	3.6	45
66	Changes in the Activity of a CPG Neuron After the Reinforcement of an Operantly Conditioned Behavior in<i>Lymnaea</i>. Journal of Neurophysiology, 2002, 88, 1915-1923.	1.8	86
67	The Soma of RPeD1 Must Be Present for Long-Term Memory Formation of Associative Learning in<i>Lymnaea</i>. Journal of Neurophysiology, 2002, 88, 1584-1591.	1.8	130
68	Specificity of synapse formation betweenLymnaea heart motor neuron and muscle fiber is maintained in vitro in a soma-muscle configuration. Synapse, 2002, 46, 66-71.	1.2	3
69	Development of Ca2+hotspots betweenLymnaeaneurons during synaptogenesis. Journal of Physiology, 2002, 539, 53-65.	2.9	32
70	Synapse Formation between Central Neurons Requires Postsynaptic Expression of the<i>MEN1</i>Tumor Suppressor Gene. Journal of Neuroscience, 2001, 21, RC161-RC161.	3.6	35
71	Functional Implications of Neurotransmitter Expression during Axonal Regeneration: Serotonin, But Not Peptides, Auto-Regulate Axon Growth of an Identified Central Neuron. Journal of Neuroscience, 2001, 21, 5597-5606.	3.6	61
72	Retrograde degeneration of neurite membrane structural integrity of nerve growth cones following in vitro exposure to mercury. NeuroReport, 2001, 12, 733-737.	1.2	100

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73	A glia-derived acetylcholine-binding protein that modulates synaptic transmission. Nature, 2001, 411, 261-268.	27.8	572
74	Target cell contact suppresses neurite outgrowth from soma-soma pairedLymnaea neurons. , 2000, 42, 357-369.		21
75	Different extrinsic trophic factors regulate neurite outgrowth and synapse formation between identifiedLymnaea neurons. Journal of Neurobiology, 2000, 44, 20-30.	3.6	22
76	Transmitterâ€"Receptor Interactions between Growth Cones of IdentifiedLymnaeaNeurons Determine Target Cell SelectionIn Vitro. Journal of Neuroscience, 2000, 20, 8077-8086.	3.6	44
77	Operant Conditioning in <i>Lymnaea</i>: Evidence for Intermediate- and Long-term Memory. Learning and Memory, 2000, 7, 140-150.	1.3	123
78	Excitatory Synaptogenesis between IdentifiedLymnaeaNeurons Requires Extrinsic Trophic Factors and Is Mediated by Receptor Tyrosine Kinases. Journal of Neuroscience, 1999, 19, 9306-9312.	3.6	70
79	Neural Changes after Operant Conditioning of the Aerial Respiratory Behavior in<i>Lymnaea stagnalis</i>. Journal of Neuroscience, 1999, 19, 1836-1843.	3.6	133
80	In Situ and In Vitro Identification and Characterization of Cardiac Ganglion Neurons in the Crab,<i>Carcinus maenas</i>. Journal of Neurophysiology, 1999, 81, 2964-2976.	1.8	54
81	Sevoflurane Induced Suppression of Inhibitory Synaptic Transmission Between Soma-Soma Paired<i>Lymnaea</i>Neurons. Journal of Neurophysiology, 1999, 82, 2812-2819.	1.8	13
82	Trophic Factor-Induced Plasticity of Synaptic Connections Between Identified <i>Lymnaea</i> Neurons. Learning and Memory, 1999, 6, 307-316.	1.3	44
83	<i>In Vitro</i>Synaptogenesis between the Somata of Identified<i>Lymnaea</i>Neurons Requires Protein Synthesis But Not Extrinsic Growth Factors or Substrate Adhesion Molecules. Journal of Neuroscience, 1997, 17, 7839-7849.	3.6	91
84	Halothane affects both inhibitory and excitatory synaptic transmission at a single identified molluscan synapse, in vivo and in vitro. Brain Research, 1996, 714, 38-48.	2.2	20
85	Ciliary neurotrophic factor, unlike nerve growth factor, supports neurite outgrowth but not synapse formation by adultLymnaea neurons. , 1996, 29, 293-303.		34
86	Rhythmic activities of isolated and clustered pacemaker neurons and photoreceptors ofAplysia retina in culture. , 1996, 31, 16-28.		5
87	A technique for the primary dissociation of neurons from restricted regions of the vertebrate CNS. Journal of Neuroscience Methods, 1995, 56, 57-70.	2.5	9
88	A neuronal network from the mollusc Lymnaea stagnalis. Brain Research, 1994, 645, 201-214.	2.2	10
89	Nitric oxide synthase-immunoreactive cells in the CNS and periphery of Lymnaea. NeuroReport, 1994, 5, 1277-1280.	1.2	92
90	Target Cell Selection and Specific Synapse Formation By Identified Ly'Mnaea Neurons in Vitro. Animal Biology, 1993, 44, 327-338.	0.4	3

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91	Specific In vitro synaptogenesis between identified Lymnaea and Helisoma neurons. NeuroReport, 1992, 3, 793-796.	1.2	16