

# Lorna W Role

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/407316/publications.pdf>

Version: 2024-02-01

95  
papers

12,888  
citations

43973

48  
h-index

40881

93  
g-index

99  
all docs

99  
docs citations

99  
times ranked

9096  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Nicotine enhancement of fast excitatory synaptic transmission in CNS by presynaptic receptors. <i>Science</i> , 1995, 269, 1692-1696.   | 6.0  | 985       |
| 2  | Physiological Diversity of Nicotinic Acetylcholine Receptors Expressed by Vertebrate Neurons. <i>Annual Review of Physiology</i> , 1995, 57, 521-546.   | 5.6  | 931       |
| 3  | Axonal Neuregulin-1 Regulates Myelin Sheath Thickness. <i>Science</i> , 2004, 304, 700-703.   | 6.0  | 821       |
| 4  | Nicotinic Receptors in the Development and Modulation of CNS Synapses. <i>Neuron</i> , 1996, 16, 1077-1085.   | 3.8  | 737       |
| 5  | Neuregulin-1 Type III Determines the Ensheathment Fate of Axons. <i>Neuron</i> , 2005, 47, 681-694.   | 3.8  | 634       |
| 6  | Basal Forebrain Cholinergic Circuits and Signaling in Cognition and Cognitive Decline. <i>Neuron</i> , 2016, 91, 1199-1218.   | 3.8  | 523       |
| 7  | PRESYNAPTIC IONOTROPIC RECEPTORS AND THE CONTROL OF TRANSMITTER RELEASE. <i>Annual Review of Neuroscience</i> , 1999, 22, 443-485.  | 5.0  | 521       |
| 8  | Functional contributions of $\alpha 5$ subunit to neuronal acetylcholine receptor channels. <i>Nature</i> , 1996, 380, 347-351.   | 13.7 | 365       |
| 9  | Acetylcholine release from growth cones detected with patches of acetylcholine receptor-rich membranes. <i>Nature</i> , 1983, 305, 632-634.   | 13.7 | 360       |
| 10 | Developmental Regulation of Nicotinic Acetylcholine Receptors. <i>Annual Review of Neuroscience</i> , 1987, 10, 403-457.  | 5.0  | 353       |
| 11 | Tangential Neuronal Migration Controls Axon Guidance: A Role for Neuregulin-1 in Thalamocortical Axon Navigation. <i>Cell</i> , 2006, 125, 127-142.   | 13.5 | 338       |
| 12 | A genetically encoded fluorescent acetylcholine indicator for in vitro and in vivo studies. <i>Nature Biotechnology</i> , 2018, 36, 726-737.  | 9.4  | 292       |
| 13 | lynx1, an Endogenous Toxin-like Modulator of Nicotinic Acetylcholine Receptors in the Mammalian CNS. <i>Neuron</i> , 1999, 23, 105-114.   | 3.8  | 285       |
| 14 | Nicotinic receptor-mediated effects on appetite and food intake. <i>Journal of Neurobiology</i> , 2002, 53, 618-632.  | 3.7  | 284       |
| 15 | Cysteine-Rich Domain Isoforms of the Neuregulin-1 Gene Are Required for Maintenance of Peripheral Synapses. <i>Neuron</i> , 2000, 25, 79-91.  | 3.8  | 277       |
| 16 | Megacystis, mydriasis, and ion channel defect in mice lacking the $\alpha 3$ neuronal nicotinic acetylcholine receptor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999, 96, 5746-5751.       | 3.3  | 267       |
| 17 | Multiorgan Autonomic Dysfunction in Mice Lacking the $\alpha 2$ and the $\alpha 4$ Subunits of Neuronal Nicotinic Acetylcholine Receptors. <i>Journal of Neuroscience</i> , 1999, 19, 9298-9305.  | 1.7  | 263       |
| 18 | Alpha4beta2 Neuronal Nicotinic Acetylcholine Receptors in the Central Nervous System Are Inhibited by Isoflurane and Propofol, but alpha7-type Nicotinic Acetylcholine Receptors Are Unaffected. <i>Anesthesiology</i> , 1997, 86, 859-865. | 1.3  | 228       |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Back signaling by the Nrg-1 intracellular domain. <i>Journal of Cell Biology</i> , 2003, 161, 1133-1141.   | 2.3 | 219       |
| 20 | Integration of Endocannabinoid and Leptin Signaling in an Appetite-Related Neural Circuit. <i>Neuron</i> , 2005, 48, 1055-1066.  | 3.8 | 211       |
| 21 | Type III Neuregulin-1 Is Required for Normal Sensorimotor Gating, Memory-Related Behaviors, and Corticostriatal Circuit Components. <i>Journal of Neuroscience</i> , 2008, 28, 6872-6883.                                    | 1.7 | 183       |
| 22 | Diversity in primary structure and function of neuronal nicotinic acetylcholine receptor channels. <i>Current Opinion in Neurobiology</i> , 1992, 2, 254-262.  | 2.0 | 178       |
| 23 | Cholinergic Signaling Controls Conditioned Fear Behaviors and Enhances Plasticity of Cortical-Amygdala Circuits. <i>Neuron</i> , 2016, 90, 1057-1070.  | 3.8 | 173       |
| 24 | Functional contribution of neuronal AChR subunits revealed by antisense oligonucleotides. <i>Science</i> , 1991, 254, 1518-1521.   | 6.0 | 154       |
| 25 | Functional contribution of the $\alpha 7$ subunit to multiple subtypes of nicotinic receptors in embryonic chick sympathetic neurones. <i>Journal of Physiology</i> , 1998, 509, 651-665.                                    | 1.3 | 139       |
| 26 | Specific Basal Forebrain Cortical Cholinergic Circuits Coordinate Cognitive Operations. <i>Journal of Neuroscience</i> , 2018, 38, 9446-9458.  | 1.7 | 139       |
| 27 | Presynaptic ionotropic receptors. <i>Current Opinion in Neurobiology</i> , 1996, 6, 342-349.   | 2.0 | 136       |
| 28 | A Cysteine-Rich Isoform of Neuregulin Controls the Level of Expression of Neuronal Nicotinic Receptor Channels during Synaptogenesis. <i>Neuron</i> , 1998, 20, 255-270.   | 3.8 | 132       |
| 29 | Coordinate Release of ATP and GABA at <i>In Vitro</i> Synapses of Lateral Hypothalamic Neurons. <i>Journal of Neuroscience</i> , 2002, 22, 4794-4804.  | 1.7 | 132       |
| 30 | Facilitation of glutamatergic neurotransmission by presynaptic nicotinic acetylcholine receptors. <i>Neuropharmacology</i> , 2000, 39, 2715-2725.  | 2.0 | 113       |
| 31 | Somatostatin and substance P inhibit catecholamine secretion from isolated cells of guinea-pig adrenal medulla. <i>Neuroscience</i> , 1981, 6, 1813-1821.  | 1.1 | 112       |
| 32 | On the mechanism of acetylcholine receptor accumulation at newly formed synapses on chick myotubes. <i>Journal of Neuroscience</i> , 1985, 5, 2197-2204.   | 1.7 | 112       |
| 33 | Nicotinic modulation of synaptic transmission and plasticity in cortico-limbic circuits. <i>Seminars in Cell and Developmental Biology</i> , 2009, 20, 432-440.  | 2.3 | 106       |
| 34 | Activators of protein kinase C enhance acetylcholine receptor desensitization in sympathetic ganglion neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1987, 84, 7739-7743. | 3.3 | 95        |
| 35 | Functional contribution of the $\alpha 5$ subunit to neuronal nicotinic channels expressed by chick sympathetic ganglion neurones. <i>Journal of Physiology</i> , 1998, 509, 667-681.  | 1.3 | 84        |
| 36 | Heteromeric Complexes of $\alpha 5$ and/or $\alpha 7$ Subunits: Effects of Calcium and Potential Role in Nicotine-Induced Presynaptic Facilitation. <i>Annals of the New York Academy of Sciences</i> , 1999, 868, 578-590.  | 1.8 | 79        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Nicotine-Induced Enhancement of Glutamatergic and GABAergic Synaptic Transmission in the Mouse Amygdala. <i>Journal of Neurophysiology</i> , 2001, 86, 463-474.   | 0.9 | 77        |
| 38 | Substance P modulation of acetylcholine-induced currents in embryonic chicken sympathetic and ciliary ganglion neurons.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1984, 81, 2924-2928.          | 3.3 | 76        |
| 39 | Presynaptic Type III Neuregulin 1 Is Required for Sustained Enhancement of Hippocampal Transmission by Nicotine and for Axonal Targeting of $\alpha 7$ Nicotinic Acetylcholine Receptors. <i>Journal of Neuroscience</i> , 2008, 28, 9111-9116. | 1.7 | 66        |
| 40 | Functional properties and developmental regulation of nicotinic acetylcholine receptors on embryonic chicken sympathetic neurons. <i>Neuron</i> , 1989, 3, 597-607.   | 3.8 | 65        |
| 41 | Intramembranous Valine Linked to Schizophrenia Is Required for Neuregulin 1 Regulation of the Morphological Development of Cortical Neurons. <i>Journal of Neuroscience</i> , 2010, 30, 9199-9208.  | 1.7 | 64        |
| 42 | Both nicotinic and muscarinic receptors mediate catecholamine secretion by isolated guinea-pig chromaffin cells. <i>Neuroscience</i> , 1983, 10, 979-985.   | 1.1 | 63        |
| 43 | Illuminating the role of cholinergic signaling in circuits of attention and emotionally salient behaviors. <i>Frontiers in Synaptic Neuroscience</i> , 2014, 6, 24.   | 1.3 | 62        |
| 44 | Substance P modulates single-channel properties of neuronal nicotinic acetylcholine receptors. <i>Neuron</i> , 1990, 4, 393-403.  | 3.8 | 58        |
| 45 | Presynaptic Type III Neuregulin1-ErbB signaling targets $\alpha 7$ nicotinic acetylcholine receptors to axons. <i>Journal of Cell Biology</i> , 2008, 181, 511-521.   | 2.3 | 57        |
| 46 | Acetylcholine is released in the basolateral amygdala in response to predictors of reward and enhances the learning of cue-reward contingency. <i>ELife</i> , 2020, 9, .  | 2.8 | 55        |
| 47 | Long-Lasting Enhancement of Glutamatergic Synaptic Transmission by Acetylcholine Contrasts with Response Adaptation after Exposure to Low-Level Nicotine. <i>Journal of Neuroscience</i> , 2001, 21, 5182-5190.                                 | 1.7 | 52        |
| 48 | Purification of adrenal medullary chromaffin cells by density gradient centrifugation. <i>Journal of Neuroscience Methods</i> , 1980, 2, 253-265.   | 1.3 | 51        |
| 49 | Requirement of Nicotinic Acetylcholine Receptor Subunit $\alpha 2$ in the Maintenance of Spiral Ganglion Neurons during Aging. <i>Journal of Neuroscience</i> , 2005, 25, 3041-3045.  | 1.7 | 50        |
| 50 | Facilitation of Corticoamygdala Synapses by Nicotine: Activity-Dependent Modulation of Glutamatergic Transmission. <i>Journal of Neurophysiology</i> , 2008, 99, 1988-1999.   | 0.9 | 49        |
| 51 | Nicotine Elicits Prolonged Calcium Signaling along Ventral Hippocampal Axons. <i>PLoS ONE</i> , 2013, 8, e82719.  | 1.1 | 48        |
| 52 | Cholinergic Modulation of Appetite-Related Synapses in Mouse Lateral Hypothalamic Slice. <i>Journal of Neuroscience</i> , 2005, 25, 11133-11144.  | 1.7 | 47        |
| 53 | Peptide modulation of ACh receptor desensitization controls neurotransmitter release from chicken sympathetic neurons. <i>Journal of Neurophysiology</i> , 1993, 69, 928-942.   | 0.9 | 45        |
| 54 | Enhanced ACh sensitivity is accompanied by changes in ACh receptor channel properties and segregation of ACh receptor subtypes on sympathetic neurons during innervation in vivo. <i>Journal of Neuroscience</i> , 1993, 13, 13-28.             | 1.7 | 45        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 55 | Cholinergic Modulation of Purinergic and GABAergic Co-Transmission at In Vitro Hypothalamic Synapses. <i>Journal of Neurophysiology</i> , 2002, 88, 2501-2508.   | 0.9  | 42        |
| 56 | Regulation of nAChR Subunit Gene Expression Relative to the Development of Pre- and Postsynaptic Projections of Embryonic Chick Sympathetic Neurons. <i>Developmental Biology</i> , 1994, 162, 56-70.  | 0.9  | 39        |
| 57 | Catecholamine uptake into isolated adrenal chromaffin cells: Inhibition of uptake by acetylcholine. <i>Neuroscience</i> , 1983, 10, 987-996.   | 1.1  | 38        |
| 58 | Neural regulation of acetylcholine sensitivity in embryonic sympathetic neurons.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1988, 85, 2825-2829.  | 3.3  | 38        |
| 59 | Type III Neuregulin 1 Is Required for Multiple Forms of Excitatory Synaptic Plasticity of Mouse Cortico-Amygdala Circuits. <i>Journal of Neuroscience</i> , 2013, 33, 9655-9666.   | 1.7  | 38        |
| 60 | Cholinergic Circuits and Signaling in the Pathophysiology of Schizophrenia. <i>International Review of Neurobiology</i> , 2007, 78, 193-223.   | 0.9  | 37        |
| 61 | Developmental changes in transmitter sensitivity and synaptic transmission in embryonic chicken sympathetic neurons innervated in Vitro. <i>Developmental Biology</i> , 1991, 147, 83-95.  | 0.9  | 35        |
| 62 | The distribution of acetylcholine receptor clusters and sites of transmitter release along chick ciliary ganglion neurite-myotube contacts in culture.. <i>Journal of Cell Biology</i> , 1987, 104, 371-379.   | 2.3  | 34        |
| 63 | Developmental regulation of multiple nicotinic AChR channel subtypes in embryonic chick habenula neurons: contributions of both the $\alpha 2$ and $\alpha 4$ subunit genes. <i>Pflugers Archiv European Journal of Physiology</i> , 1994, 429, 27-43. | 1.3  | 34        |
| 64 | Memories of nicotine. <i>Nature</i> , 1996, 383, 670-671.  | 13.7 | 33        |
| 65 | Neuronal nicotinic acetylcholine receptor modulation by general anesthetics. <i>Toxicology Letters</i> , 1998, 100-101, 149-153.   | 0.4  | 32        |
| 66 | Mechanisms of ionophore-induced catecholamine secretion. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 1980, 213, 241-6.  | 1.3  | 31        |
| 67 | Changes in the number of chick ciliary ganglion neuron processes with time in cell culture.. <i>Journal of Cell Biology</i> , 1987, 104, 363-370.  | 2.3  | 29        |
| 68 | Selective deletion of the $\alpha 5$ subunit differentially affects somatic-dendritic versus axonally targeted nicotinic ACh receptors in mouse. <i>Journal of Physiology</i> , 2005, 563, 119-137.  | 1.3  | 29        |
| 69 | New order for thought disorders. <i>Nature</i> , 2007, 448, 263-265.   | 13.7 | 29        |
| 70 | Increased stability of microtubules in cultured olfactory neuroepithelial cells from individuals with schizophrenia. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2014, 48, 252-258.  | 2.5  | 29        |
| 71 | Uptake of antisense oligonucleotides and functional block of acetylcholine receptor subunit gene expression in primary embryonic neurons. <i>Genesis</i> , 1993, 14, 296-304.  | 3.1  | 28        |
| 72 | Target-specific control of nicotinic receptor expression at developing interneuronal synapses in chick. <i>Nature Neuroscience</i> , 1999, 2, 528-534.   | 7.1  | 26        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Protein kinase C blocks somatostatin-induced modulation of calcium current in chick sympathetic neurons. <i>Journal of Neurophysiology</i> , 1993, 70, 1639-1643.                                 | 0.9 | 25        |
| 74 | Type III neuregulin 1 regulates pathfinding of sensory axons in the developing spinal cord and periphery. <i>Development (Cambridge)</i> , 2011, 138, 4887-4898.                                  | 1.2 | 24        |
| 75 | Disrupted Activity in the Hippocampalâ€Accumbens Circuit of Type III Neuregulin 1 Mutant Mice. <i>Neuropsychopharmacology</i> , 2011, 36, 488-496.  | 2.8 | 23        |
| 76 | Modulation of Nicotinic AChR Channels by Prostaglandin E2 in Chick Sympathetic Ganglion Neurons. <i>Journal of Neurophysiology</i> , 1998, 79, 870-878.   | 0.9 | 20        |
| 77 | Multiple personalities of neuregulin gene family members. <i>Journal of Comparative Neurology</i> , 2004, 472, 134-139.   | 0.9 | 19        |
| 78 | Differential Modulation of Nicotinic Acetylcholine Receptor Subtypes and Synaptic Transmission in Chick Sympathetic Ganglia by PGE2. <i>Journal of Neurophysiology</i> , 2001, 85, 2498-2508.     | 0.9 | 18        |
| 79 | Electrophysiological properties of basal forebrain cholinergic neurons identified by genetic and optogenetic tagging. <i>Journal of Neurochemistry</i> , 2017, 142, 103-110.                      | 2.1 | 18        |
| 80 | Development of synaptic transmission at autonomic synapses in vitro revealed by cytochrome oxidase histochemistry. <i>Journal of Neurobiology</i> , 1990, 21, 578-591.                            | 3.7 | 16        |
| 81 | Age-related neuronal loss in the cochlea is not delayed by synaptic modulation. <i>Neurobiology of Aging</i> , 2011, 32, 2321.e13-2321.e23.   | 1.5 | 16        |
| 82 | <i>Mecp2</i> Deletion from Cholinergic Neurons Selectively Impairs Recognition Memory and Disrupts Cholinergic Modulation of the Perirhinal Cortex. <i>ENeuro</i> , 2019, 6, ENEURO.0134-19.2019. | 0.9 | 14        |
| 83 | Overnight Fasting Regulates Inhibitory Tone to Cholinergic Neurons of the Dorsomedial Nucleus of the Hypothalamus. <i>PLoS ONE</i> , 2013, 8, e60828.   | 1.1 | 13        |
| 84 | Type III Nrg1 Back Signaling Enhances Functional TRPV1 along Sensory Axons Contributing to Basal and Inflammatory Thermal Pain Sensation. <i>PLoS ONE</i> , 2011, 6, e25108.                      | 1.1 | 12        |
| 85 | Optogenetic studies of nicotinic contributions to cholinergic signaling in the central nervous system. <i>Reviews in the Neurosciences</i> , 2014, 25, 755-71.                                    | 1.4 | 12        |
| 86 | Axonal Type III Nrg1 Controls Glutamate Synapse Formation and GluA2 Trafficking in Hippocampal-Accumbens Connections. <i>ENeuro</i> , 2017, 4, ENEURO.0232-16.2017.                               | 0.9 | 10        |
| 87 | Substance P potentiates calcium channel modulation by somatostatin in chick sympathetic ganglia. <i>Journal of Neurophysiology</i> , 1994, 72, 2683-2690.   | 0.9 | 8         |
| 88 | Mapping of presynaptic nicotinic acetylcholine receptors using fluorescence imaging of neuritic calcium. <i>Journal of Neuroscience Methods</i> , 2003, 122, 109-122.                             | 1.3 | 7         |
| 89 | Presynaptic type III neuregulin1-ErbB signaling targets $\alpha 7$ nicotinic acetylcholine receptors to axons. <i>Journal of General Physiology</i> , 2008, 131, i4-i4.                           | 0.9 | 7         |
| 90 | Regional variations in calculated diastolic wall stress in rat left ventricle. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1978, 235, H247-H250.                   | 1.5 | 6         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 91 | Activation of phosphoinositide turnover and protein kinase C by neurotransmitters that modulate calcium channels in embryonic chick sensory neurons. International Journal of Developmental Neuroscience, 1992, 10, 421-433. | 0.7 | 6         |
| 92 | Live Imaging of Nicotine Induced Calcium Signaling and Neurotransmitter Release Along Ventral Hippocampal Axons. Journal of Visualized Experiments, 2015, , e52730.  | 0.2 | 5         |
| 93 | Diversity in Functional Properties and Primary Structure of Neuronal Nicotinic Receptor Channels. Kidney and Blood Pressure Research, 1994, 17, 172-177.   | 0.9 | 2         |
| 94 | Research in Neuroscience: Fidia Research Foundation Neuroscience Award Lectures.. Science, 1988, 241, 1238-1238.   | 6.0 | 0         |
| 95 | Presynaptic Nicotinic Acetylcholine Receptors and the Modulation of Circuit Excitability. Receptors, 2014, , 137-167.  | 0.2 | 0         |