

# Erin M Schuman

## List of Publications by Citations

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176  
papers

21,916  
citations

76  
h-index

147  
g-index

192  
ext. papers

25,081  
ext. citations

13.7  
avg, IF

7.22  
L-index

| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 176 | Long-lasting neurotrophin-induced enhancement of synaptic transmission in the adult hippocampus. <i>Science</i> , <b>1995</b> , 267, 1658-62   | 33.3 | 1190      |
| 175 | A requirement for the intercellular messenger nitric oxide in long-term potentiation. <i>Science</i> , <b>1991</b> , 254, 1503-6   | 33.3 | 1102      |
| 174 | A requirement for local protein synthesis in neurotrophin-induced hippocampal synaptic plasticity. <i>Science</i> , <b>1996</b> , 273, 1402-6  | 33.3 | 803       |
| 173 | Neural circular RNAs are derived from synaptic genes and regulated by development and plasticity. <i>Nature Neuroscience</i> , <b>2015</b> , 18, 603-610   | 25.5 | 719       |
| 172 | Nitric oxide and synaptic function. <i>Annual Review of Neuroscience</i> , <b>1994</b> , 17, 153-83  | 17   | 697       |
| 171 | Dendritic protein synthesis, synaptic plasticity, and memory. <i>Cell</i> , <b>2006</b> , 127, 49-58   | 56.2 | 625       |
| 170 | Protein synthesis at synaptic sites on dendrites. <i>Annual Review of Neuroscience</i> , <b>2001</b> , 24, 299-325   | 17   | 591       |
| 169 | A rapamycin-sensitive signaling pathway contributes to long-term synaptic plasticity in the hippocampus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 467-72                                 | 11.5 | 589       |
| 168 | Selective identification of newly synthesized proteins in mammalian cells using bioorthogonal noncanonical amino acid tagging (BONCAT). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 9482-7 | 11.5 | 551       |
| 167 | Dynamic visualization of local protein synthesis in hippocampal neurons. <i>Neuron</i> , <b>2001</b> , 30, 489-502   | 13.9 | 494       |
| 166 | The local transcriptome in the synaptic neuropil revealed by deep sequencing and high-resolution imaging. <i>Neuron</i> , <b>2012</b> , 74, 453-66   | 13.9 | 485       |
| 165 | Miniature neurotransmission stabilizes synaptic function via tonic suppression of local dendritic protein synthesis. <i>Cell</i> , <b>2006</b> , 125, 785-99   | 56.2 | 481       |
| 164 | Neurotrophins and time: different roles for TrkB signaling in hippocampal long-term potentiation. <i>Neuron</i> , <b>1997</b> , 19, 653-64   | 13.9 | 440       |
| 163 | Human memory strength is predicted by theta-frequency phase-locking of single neurons. <i>Nature</i> , <b>2010</b> , 464, 903-7  | 50.4 | 423       |
| 162 | The central dogma decentralized: new perspectives on RNA function and local translation in neurons. <i>Neuron</i> , <b>2013</b> , 80, 648-57   | 13.9 | 359       |
| 161 | Ubiquitin, the proteasome and protein degradation in neuronal function and dysfunction. <i>Nature Reviews Neuroscience</i> , <b>2008</b> , 9, 826-38   | 13.5 | 344       |
| 160 | Compartmentalized synthesis and degradation of proteins in neurons. <i>Neuron</i> , <b>2003</b> , 40, 347-59   | 13.9 | 339       |

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|-----|---|------|-----|
| 159 | Locally distributed synaptic potentiation in the hippocampus. <i>Science</i> , <b>1994</b> , 263, 532-6   | 33.3 | 331 |
| 158 | In situ visualization and dynamics of newly synthesized proteins in rat hippocampal neurons. <i>Nature Neuroscience</i> , <b>2010</b> , 13, 897-905   | 25.5 | 325 |
| 157 | A role for the cadherin family of cell adhesion molecules in hippocampal long-term potentiation. <i>Neuron</i> , <b>1998</b> , 20, 1165-75  | 13.9 | 311 |
| 156 | Depolarization drives beta-Catenin into neuronal spines promoting changes in synaptic structure and function. <i>Neuron</i> , <b>2002</b> , 35, 91-105  | 13.9 | 294 |
| 155 | Role for a cortical input to hippocampal area CA1 in the consolidation of a long-term memory. <i>Nature</i> , <b>2004</b> , 431, 699-703  | 50.4 | 279 |
| 154 | Enhancement of neurotransmitter release induced by brain-derived neurotrophic factor in cultured hippocampal neurons. <i>Journal of Neuroscience</i> , <b>1998</b> , 18, 10231-40                                       | 6.6  | 278 |
| 153 | Neurotrophin regulation of synaptic transmission. <i>Current Opinion in Neurobiology</i> , <b>1999</b> , 9, 105-9   | 7.6  | 275 |
| 152 | Tetanic stimulation leads to increased accumulation of Ca(2+)/calmodulin-dependent protein kinase II via dendritic protein synthesis in hippocampal neurons. <i>Journal of Neuroscience</i> , <b>1999</b> , 19, 7823-33 | 6.6  | 253 |
| 151 | Activity-dependent dynamics and sequestration of proteasomes in dendritic spines. <i>Nature</i> , <b>2006</b> , 441, 1144-8   | 50.4 | 251 |
| 150 | Inhibition of hippocampal heme oxygenase, nitric oxide synthase, and long-term potentiation by metalloporphyrins. <i>Neuron</i> , <b>1994</b> , 13, 1225-33   | 13.9 | 237 |
| 149 | Labeling, detection and identification of newly synthesized proteomes with bioorthogonal non-canonical amino-acid tagging. <i>Nature Protocols</i> , <b>2007</b> , 2, 532-40  | 18.8 | 230 |
| 148 | A role for endothelial NO synthase in LTP revealed by adenovirus-mediated inhibition and rescue. <i>Science</i> , <b>1996</b> , 274, 1744-8   | 33.3 | 225 |
| 147 | A role for BDNF in the late-phase of hippocampal long-term potentiation. <i>Neuropharmacology</i> , <b>1998</b> , 37, 553-9   | 5.5  | 215 |
| 146 | Postsynaptic decoding of neural activity: eEF2 as a biochemical sensor coupling miniature synaptic transmission to local protein synthesis. <i>Neuron</i> , <b>2007</b> , 55, 648-61                                    | 13.9 | 211 |
| 145 | Microfluidic local perfusion chambers for the visualization and manipulation of synapses. <i>Neuron</i> , <b>2010</b> , 66, 57-68   | 13.9 | 210 |
| 144 | Regulation of dendritic protein synthesis by miniature synaptic events. <i>Science</i> , <b>2004</b> , 304, 1979-83   | 33.3 | 208 |
| 143 | Online detection and sorting of extracellularly recorded action potentials in human medial temporal lobe recordings, in vivo. <i>Journal of Neuroscience Methods</i> , <b>2006</b> , 154, 204-24                        | 3    | 200 |
| 142 | Single-trial learning of novel stimuli by individual neurons of the human hippocampus-amygdala complex. <i>Neuron</i> , <b>2006</b> , 49, 805-13  | 13.9 | 199 |

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|-----|--|------|-----|
| 141 | Dopaminergic stimulation of local protein synthesis enhances surface expression of GluR1 and synaptic transmission in hippocampal neurons. <i>Neuron</i> , <b>2005</b> , 45, 765-79  | 13.9 | 198 |
| 140 | Visualization of the distribution of autophosphorylated calcium/calmodulin-dependent protein kinase II after tetanic stimulation in the CA1 area of the hippocampus. <i>Journal of Neuroscience</i> , <b>1997</b> , 17, 5416-27  | 6.6  | 196 |
| 139 | A role for a rat homolog of staufen in the transport of RNA to neuronal dendrites. <i>Neuron</i> , <b>2001</b> , 32, 463-75  | 13.9 | 191 |
| 138 | Synaptic regulation of translation of dendritic mRNAs. <i>Journal of Neuroscience</i> , <b>2006</b> , 26, 7143-6   | 6.6  | 188 |
| 137 | Direct visualization of newly synthesized target proteins in situ. <i>Nature Methods</i> , <b>2015</b> , 12, 411-4   | 21.6 | 174 |
| 136 | Local translation in neurons: visualization and function. <i>Nature Structural and Molecular Biology</i> , <b>2019</b> , 26, 557-566   | 17.6 | 171 |
| 135 | Ubiquitin-mediated proteasome activity is required for agonist-induced endocytosis of GluRs. <i>Current Biology</i> , <b>2003</b> , 13, 2073-81  | 6.3  | 169 |
| 134 | Local translational control in dendrites and its role in long-term synaptic plasticity. <i>Journal of Neurobiology</i> , <b>2005</b> , 64, 116-31  |      | 161 |
| 133 | Direct cortical input modulates plasticity and spiking in CA1 pyramidal neurons. <i>Nature</i> , <b>2002</b> , 416, 736-40   | 10.4 | 158 |
| 132 | Alternative 3'UTRs Modify the Localization, Regulatory Potential, Stability, and Plasticity of mRNAs in Neuronal Compartments. <i>Neuron</i> , <b>2018</b> , 98, 495-511.e6  | 13.9 | 155 |
| 131 | Local protein synthesis is a ubiquitous feature of neuronal pre- and postsynaptic compartments. <i>Science</i> , <b>2019</b> , 364,  | 33.3 | 154 |
| 130 | Cleavable biotin probes for labeling of biomolecules via azide-alkyne cycloaddition. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 18351-60   | 16.4 | 144 |
| 129 | The role of cell adhesion molecules in synaptic plasticity and memory. <i>Current Opinion in Cell Biology</i> , <b>1999</b> , 11, 549-53   | 9    | 139 |
| 128 | Cell-selective metabolic labeling of proteins. <i>Nature Chemical Biology</i> , <b>2009</b> , 5, 715-7   | 11.7 | 132 |
| 127 | Activity-regulated N-cadherin endocytosis. <i>Neuron</i> , <b>2007</b> , 54, 771-85  | 13.9 | 130 |
| 126 | Protein homeostasis and synaptic plasticity. <i>EMBO Journal</i> , <b>2010</b> , 29, 2746-52   | 13   | 128 |
| 125 | Expression of a dominant negative TrkB receptor, T1, reveals a requirement for presynaptic signaling in BDNF-induced synaptic potentiation in cultured hippocampal neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1998</b> , 95, 10884-9 | 11.5 | 128 |
| 124 | Spatially Stable Mitochondrial Compartments Fuel Local Translation during Plasticity. <i>Cell</i> , <b>2019</b> , 176, 73-84.e15   | 56.2 | 128 |

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|-----|--|------|-----|
| 123 | Circular RNAs in Brain and Other Tissues: A Functional Enigma. <i>Trends in Neurosciences</i> , <b>2016</b> , 39, 597-604  | 13.3 | 127 |
| 122 | An ADP-ribosyltransferase as a potential target for nitric oxide action in hippocampal long-term potentiation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1994</b> , 91, 11958-62 | 11.5 | 123 |
| 121 | mRNA transport & local translation in neurons. <i>Current Opinion in Neurobiology</i> , <b>2017</b> , 45, 169-177  | 7.6  | 122 |
| 120 | Activity-dependent spatially localized miRNA maturation in neuronal dendrites. <i>Science</i> , <b>2017</b> , 355, 634-637   | 6.3  | 116 |
| 119 | Proteostasis in complex dendrites. <i>Nature Reviews Neuroscience</i> , <b>2013</b> , 14, 638-48   | 13.5 | 106 |
| 118 | Removal of S6K1 and S6K2 leads to divergent alterations in learning, memory, and synaptic plasticity. <i>Learning and Memory</i> , <b>2008</b> , 15, 29-38   | 2.8  | 106 |
| 117 | Local translation in neuronal compartments: how local is local?. <i>EMBO Reports</i> , <b>2017</b> , 18, 693-711   | 6.5  | 102 |
| 116 | Synaptic protein degradation by the ubiquitin proteasome system. <i>Current Opinion in Neurobiology</i> , <b>2005</b> , 15, 536-41   | 7.6  | 102 |
| 115 | Local and global influences on protein turnover in neurons and glia. <i>ELife</i> , <b>2018</b> , 7,   | 8.9  | 101 |
| 114 | Regulation and function of local protein synthesis in neuronal dendrites. <i>Trends in Biochemical Sciences</i> , <b>2002</b> , 27, 506-13   | 10.3 | 94  |
| 113 | Non-canonical amino acid labeling in vivo to visualize and affinity purify newly synthesized proteins in larval zebrafish. <i>ACS Chemical Neuroscience</i> , <b>2012</b> , 3, 40-49   | 5.7  | 88  |
| 112 | Cadherins and synaptic plasticity. <i>Current Opinion in Cell Biology</i> , <b>2008</b> , 20, 567-75   | 9    | 88  |
| 111 | Nascent Proteome Remodeling following Homeostatic Scaling at Hippocampal Synapses. <i>Neuron</i> , <b>2016</b> , 92, 358-371   | 13.9 | 85  |
| 110 | Cell-type-specific metabolic labeling of nascent proteomes in vivo. <i>Nature Biotechnology</i> , <b>2017</b> , 35, 1196-1201  | 14.9 | 85  |
| 109 | Synapse specificity and long-term information storage. <i>Neuron</i> , <b>1997</b> , 18, 339-42  | 13.9 | 85  |
| 108 | Characterization of the Brain 26S Proteasome and its Interacting Proteins. <i>Frontiers in Molecular Neuroscience</i> , <b>2010</b> , 3,   | 6.1  | 82  |
| 107 | mRNA trafficking and local protein synthesis at the synapse. <i>Neuron</i> , <b>1999</b> , 23, 645-8   | 13.9 | 82  |
| 106 | Cerebellar-dependent learning in larval zebrafish. <i>Journal of Neuroscience</i> , <b>2011</b> , 31, 8708-12  | 6.6  | 81  |

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|-----|--|------|----|
| 105 | Activity of human hippocampal and amygdala neurons during retrieval of declarative memories. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2008</b> , 105, 329-34  | 11.5 | 78 |
| 104 | The Regulation of Synaptic Protein Turnover. <i>Journal of Biological Chemistry</i> , <b>2015</b> , 290, 28623-30  | 5.4  | 77 |
| 103 | Calcium-dependent dynamics of cadherin interactions at cell-cell junctions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 9857-62  | 11.5 | 77 |
| 102 | Inhibition of 26S proteasome activity by huntingtin filaments but not inclusion bodies isolated from mouse and human brain. <i>Journal of Neurochemistry</i> , <b>2006</b> , 98, 1585-96   | 6    | 77 |
| 101 | Monosomes actively translate synaptic mRNAs in neuronal processes. <i>Science</i> , <b>2020</b> , 367,   | 33.3 | 76 |
| 100 | A proteasome-sensitive connection between PSD-95 and GluR1 endocytosis. <i>Neuropharmacology</i> , <b>2004</b> , 47, 755-63  | 5.5  | 75 |
| 99  | Axonal translation of Ectenin regulates synaptic vesicle dynamics. <i>Journal of Neuroscience</i> , <b>2013</b> , 33, 5584-9   | 6.6  | 72 |
| 98  | Cell-specific proteomic analysis in <i>Caenorhabditis elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 2705-10  | 11.5 | 68 |
| 97  | Unconventional secretory processing diversifies neuronal ion channel properties. <i>ELife</i> , <b>2016</b> , 5,   | 8.9  | 65 |
| 96  | Constitutive/hypoxic degradation of HIF-alpha proteins by the proteasome is independent of von Hippel Lindau protein ubiquitylation and the transactivation activity of the protein. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 15498-505 | 5.4  | 61 |
| 95  | Light-mediated inhibition of protein synthesis. <i>Chemistry and Biology</i> , <b>2005</b> , 12, 685-93  |      | 59 |
| 94  | Patterned activity in stratum lacunosum moleculare inhibits CA1 pyramidal neuron firing. <i>Journal of Neurophysiology</i> , <b>1999</b> , 82, 3213-22   | 3.2  | 59 |
| 93  | Local translation in neuronal processes. <i>Current Opinion in Neurobiology</i> , <b>2019</b> , 57, 141-148  | 7.6  | 58 |
| 92  | Determinants of BDNF-induced hippocampal synaptic plasticity: role of the Trk B receptor and the kinetics of neurotrophin delivery. <i>Learning and Memory</i> , <b>1996</b> , 3, 188-96   | 2.8  | 55 |
| 91  | Molecular mechanisms contributing to long-lasting synaptic plasticity at the temporoammonic-CA1 synapse. <i>Learning and Memory</i> , <b>2003</b> , 10, 247-52   | 2.8  | 54 |
| 90  | Long-range temporal correlations in the spontaneous spiking of neurons in the hippocampal-amygdala complex of humans. <i>Neuroscience</i> , <b>2005</b> , 131, 547-55  | 3.9  | 52 |
| 89  | Dopaminergic modulation of the hippocampal neuropil proteome identified by bioorthogonal noncanonical amino acid tagging (BONCAT). <i>Proteomics</i> , <b>2012</b> , 12, 2464-76   | 4.8  | 50 |
| 88  | Quantitative, time-resolved proteomic analysis by combining bioorthogonal noncanonical amino acid tagging and pulsed stable isotope labeling by amino acids in cell culture. <i>Molecular and Cellular Proteomics</i> , <b>2014</b> , 13, 1352-8           | 7.6  | 49 |

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|----|--|------|----|
| 87 | Functional division of hippocampal area CA1 via modulatory gating of entorhinal cortical inputs. <i>Hippocampus</i> , <b>2012</b> , 22, 372-87   | 3.5  | 46 |
| 86 | Mutant methionyl-tRNA synthetase from bacteria enables site-selective N-terminal labeling of proteins expressed in mammalian cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 4992-7 | 11.5 | 45 |
| 85 | Synaptic facilitation at connections of Hermissenda type B photoreceptors. <i>Journal of Neuroscience</i> , <b>1994</b> , 14, 1613-22  | 6.6  | 45 |
| 84 | Mechanism of direct degradation of IkappaBalpha by 20S proteasome. <i>FEBS Letters</i> , <b>2005</b> , 579, 4797-802   | 3.8  | 44 |
| 83 | Synaptic control of secretory trafficking in dendrites. <i>Cell Reports</i> , <b>2014</b> , 7, 1771-8  | 10.6 | 43 |
| 82 | alpha-Synuclein expression levels do not significantly affect proteasome function and expression in mice and stably transfected PC12 cell lines. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 52984-90                                  | 5.4  | 43 |
| 81 | Intracellular Ca(2+) signaling is required for neurotrophin-induced potentiation in the adult rat hippocampus. <i>Neuroscience Letters</i> , <b>2000</b> , 282, 141-4  | 3.3  | 43 |
| 80 | Long-term depression of temporoammonic-CA1 hippocampal synaptic transmission. <i>Journal of Neurophysiology</i> , <b>1999</b> , 81, 1036-44  | 3.2  | 43 |
| 79 | Mechanism of cleavage of alpha-synuclein by the 20S proteasome and modulation of its degradation by the RedOx state of the N-terminal methionines. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , <b>2014</b> , 1843, 352-65         | 4.9  | 38 |
| 78 | Design of photocaged puromycin for nascent polypeptide release and spatiotemporal monitoring of translation. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 3717-21  | 16.4 | 38 |
| 77 | Protein synthesis-dependent associative long-term memory in larval zebrafish. <i>Journal of Neuroscience</i> , <b>2013</b> , 33, 15382-7   | 6.6  | 38 |
| 76 | Proteome dynamics during homeostatic scaling in cultured neurons. <i>ELife</i> , <b>2020</b> , 9,  | 8.9  | 34 |
| 75 | Time- and polarity-dependent proteomic changes associated with homeostatic scaling at central synapses. <i>ELife</i> , <b>2018</b> , 7,  | 8.9  | 33 |
| 74 | Deep sequencing and high-resolution imaging reveal compartment-specific localization of Bdnf mRNA in hippocampal neurons. <i>Science Signaling</i> , <b>2013</b> , 6, rs16   | 8.8  | 32 |
| 73 | BONCAT: metabolic labeling, click chemistry, and affinity purification of newly synthesized proteomes. <i>Methods in Molecular Biology</i> , <b>2015</b> , 1266, 199-215   | 1.4  | 32 |
| 72 | Engineered Aminoacyl-tRNA Synthetase for Cell-Selective Analysis of Mammalian Protein Synthesis. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 4278-81  | 16.4 | 30 |
| 71 | Teaching old NCATs new tricks: using non-canonical amino acid tagging to study neuronal plasticity. <i>Current Opinion in Chemical Biology</i> , <b>2013</b> , 17, 738-46  | 9.7  | 30 |
| 70 | Partitioning the synaptic landscape: distinct microdomains for spontaneous and spike-triggered neurotransmission. <i>Science Signaling</i> , <b>2009</b> , 2, pe19   | 8.8  | 27 |



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|----|--|------|----|
| 69 | How mRNA Localization and Protein Synthesis Sites Influence Dendritic Protein Distribution and Dynamics. <i>Neuron</i> , <b>2019</b> , 103, 1109-1122.e7   | 13.9 | 26 |
| 68 | Full-length transcriptome reconstruction reveals a large diversity of RNA and protein isoforms in rat hippocampus. <i>Nature Communications</i> , <b>2019</b> , 10, 5009   | 17.4 | 26 |
| 67 | Synphilin-1 inhibits alpha-synuclein degradation by the proteasome. <i>Cellular and Molecular Life Sciences</i> , <b>2011</b> , 68, 2643-54  | 10.3 | 26 |
| 66 | Recombinant adenovirus-mediated expression in nervous system of genes coding for ion channels and other molecules involved in synaptic function. <i>Methods in Enzymology</i> , <b>1998</b> , 293, 483-503   | 1.7  | 26 |
| 65 | Neuronal NT-3 Is not Required For Synaptic Transmission or Long-Term Potentiation in Area CA1 of the Adult Rat Hippocampus. <i>Learning and Memory</i> , <b>1999</b> , 6, 267-275  | 2.8  | 26 |
| 64 | A critical appraisal of quantitative studies of protein degradation in the framework of cellular proteostasis. <i>Biochemistry Research International</i> , <b>2012</b> , 2012, 823597   | 2.4  | 24 |
| 63 | Abundant GFP expression and LTP in hippocampal acute slices by in vivo injection of sindbis virus. <i>Journal of Neurophysiology</i> , <b>2001</b> , 86, 1037-42   | 3.2  | 24 |
| 62 | Cell-type-specific metabolic labeling, detection and identification of nascent proteomes in vivo. <i>Nature Protocols</i> , <b>2019</b> , 14, 556-575  | 18.8 | 24 |
| 61 | Reduced protein stability of human DJ-1/PARK7 L166P, linked to autosomal recessive Parkinson disease, is due to direct endoproteolytic cleavage by the proteasome. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , <b>2012</b> , 1823, 524-33 | 4.9  | 22 |
| 60 | Glutamate Receptor Trafficking and Protein Synthesis Mediate the Facilitation of LTP by Secreted Amyloid Precursor Protein-Alpha. <i>Journal of Neuroscience</i> , <b>2019</b> , 39, 3188-3203   | 6.6  | 21 |
| 59 | State-selective metabolic labeling of cellular proteins. <i>ACS Chemical Biology</i> , <b>2012</b> , 7, 1326-30  | 4.9  | 21 |
| 58 | Visualization of newly synthesized neuronal RNA in vitro and in vivo using click-chemistry. <i>RNA Biology</i> , <b>2017</b> , 14, 20-28   | 4.8  | 20 |
| 57 | MicroRNA: microRNAs reach out into dendrites. <i>Current Biology</i> , <b>2006</b> , 16, R121-3  | 6.3  | 20 |
| 56 | SnapShot: local protein translation in dendrites. <i>Neuron</i> , <b>2014</b> , 81, 958-958.e1   | 13.9 | 19 |
| 55 | Nitric oxide as an intercellular signal in long-term potentiation. <i>Seminars in Neuroscience</i> , <b>1993</b> , 5, 207-215  |      | 17 |
| 54 | Differential regulation of local mRNA dynamics and translation following long-term potentiation and depression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,                                    | 11.5 | 17 |
| 53 | Measurement of dendritic mRNA transport using ribosomal markers. <i>Biochemical and Biophysical Research Communications</i> , <b>2005</b> , 328, 895-900   | 3.4  | 16 |
| 52 | Role of N-cadherin cis and trans interfaces in the dynamics of adherens junctions in living cells. <i>PLoS ONE</i> , <b>2013</b> , 8, e81517   | 3.7  | 16 |



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|----|---|------|----|
| 51 | Long and Repeat-Rich Intronic Sequences Favor Circular RNA Formation under Conditions of Reduced Spliceosome Activity. <i>iScience</i> , <b>2019</b> , 20, 237-247                                  | 6.1  | 15 |
| 50 | Modification of hippocampal synaptic proteins by nitric oxide-stimulated ADP ribosylation. <i>Learning and Memory</i> , <b>1997</b> , 3, 414-24   | 2.8  | 15 |
| 49 | Subcellular sequencing of single neurons reveals the dendritic transcriptome of GABAergic interneurons. <i>ELife</i> , <b>2021</b> , 10,  | 8.9  | 15 |
| 48 | The aspirin metabolite sodium salicylate causes focal cerebral hemorrhage and cell death in rats with kainic acid-induced seizures. <i>Neuroscience</i> , <b>2000</b> , 99, 107-17                  | 3.9  | 14 |
| 47 | The switch-like expression of heme-regulated kinase 1 mediates neuronal proteostasis following proteasome inhibition. <i>ELife</i> , <b>2020</b> , 9,   | 8.9  | 14 |
| 46 | The neuropeptide Pth2 dynamically senses others via mechanosensation. <i>Nature</i> , <b>2020</b> , 588, 653-657  | 50.4 | 14 |
| 45 | Fueling synapses. <i>Cell</i> , <b>2004</b> , 119, 738-40   | 56.2 | 13 |
| 44 | Involvement of nitric oxide in synaptic plasticity and learning. <i>Seminars in Neuroscience</i> , <b>1994</b> , 6, 11-20   |      | 12 |
| 43 | ATM phosphorylation of the actin-binding protein drebrin controls oxidation stress-resistance in mammalian neurons and <i>C. elegans</i> . <i>Nature Communications</i> , <b>2019</b> , 10, 486     | 17.4 | 11 |
| 42 | Local protein synthesis in neurons. <i>Current Biology</i> , <b>2001</b> , 11, R901-3   | 6.3  | 11 |
| 41 | A New Photocaged Puromycin for an Efficient Labeling of Newly Translated Proteins in Living Neurons. <i>ChemBioChem</i> , <b>2018</b> , 19, 2458-2464   | 3.8  | 11 |
| 40 | Super-resolution imaging and estimation of protein copy numbers at single synapses with DNA-point accumulation for imaging in nanoscale topography. <i>NeuroPhotonics</i> , <b>2019</b> , 6, 035008 | 3.9  | 10 |
| 39 | The N-terminal region of Nurr1 (a.a 1-31) is essential for its efficient degradation by the ubiquitin proteasome pathway. <i>PLoS ONE</i> , <b>2013</b> , 8, e55999                                 | 3.7  | 10 |
| 38 | Molecular biology. mRNA, live and unmasked. <i>Science</i> , <b>2014</b> , 343, 375-6   | 33.3 | 9  |
| 37 | LTP, post or pre? A look at the evidence for the locus of long-term potentiation. <i>The New Biologist</i> , <b>1991</b> , 3, 549-57  |      | 9  |
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| 13 | Dynamic bi-directional phosphorylation events associated with the reciprocal regulation of synapses during homeostatic up- and down-scaling. <i>Cell Reports</i> , <b>2021</b> , 36, 109583 | 10.6 | 2 |
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