# Kimberly M Huber

List of Publications by Year
in descending order



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|---|---|---|---|
| 61 papers | 9,222 citations | 101543 36 h-index | 123424 61 g-index |
| 65 all docs | 65 docs citations | 65 times ranked | 7392 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The mGluR theory of fragile X mental retardation. Trends in Neurosciences, 2004, 27, 370-377. | 8.6 | 1,431 |
| 2 | Altered synaptic plasticity in a mouse model of fragile X mental retardation. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 7746-7750. | 7.1 | 1,208 |
| 3 | Group 1 mGluR-Dependent Synaptic Long-Term Depression: Mechanisms and Implications for Circuitry and Disease. Neuron, 2010, 65, 445-459. | 8.1 | 529 |
| 4 | Internalization of ionotropic glutamate receptors in response to mGluR activation. Nature Neuroscience, 2001, 4, 1079-1085. | 14.8 | 492 |
| 5 | Imbalance of Neocortical Excitation and Inhibition and Altered UP States Reflect Network Hyperexcitability in the Mouse Model of Fragile X Syndrome. Journal of Neurophysiology, 2008, 100, 2615-2626. | 1.8 | 453 |
| 6 | Rapid Translation of Arc/Arg3.1 Selectively Mediates mGluR-Dependent LTD through Persistent Increases in AMPAR Endocytosis Rate. Neuron, 2008, 59, 84-97. | 8.1 | 419 |
| 7 | Chemical Induction of mGluR5- and Protein Synthesisâ€“Dependent Long-Term Depression in Hippocampal Area CA1. Journal of Neurophysiology, 2001, 86, 321-325. | 1.8 | 342 |
| 8 | Metabotropic Receptor-Dependent Long-Term Depression Persists in the Absence of Protein Synthesis in the Mouse Model of Fragile X Syndrome. Journal of Neurophysiology, 2006, 95, 3291-3295. | 1.8 | 242 |
| 9 | Multiple Autism-Linked Genes Mediate Synapse Elimination via Proteasomal Degradation of a Synaptic Scaffold PSD-95. Cell, 2012, 151, 1581-1594. | 28.9 | 235 |
| 10 | Extracellular Signal-Regulated Protein Kinase Activation Is Required for Metabotropic Glutamate Receptor-Dependent Long-Term Depression in Hippocampal Area CA1. Journal of Neuroscience, 2004, 24, 4859-4864. | 3.6 | 228 |
| 11 | Disrupted Homer scaffolds mediate abnormal mGluR5 function in a mouse model of fragile X syndrome. Nature Neuroscience, 2012, 15, 431-440. | 14.8 | 225 |
| 12 | Homer Interactions Are Necessary for Metabotropic Glutamate Receptor-Induced Long-Term Depression and Translational Activation. Journal of Neuroscience, 2008, 28, 543-547. | 3.6 | 224 |
| 13 | PLC-Î²1, activated via mGluRs, mediates activity-dependent differentiation in cerebral cortex. Nature Neuroscience, 2001, 4, 282-288. | 14.8 | 210 |
| 14 | The State of Synapses in Fragile X Syndrome. Neuroscientist, 2009, 15, 549-567. | 3.5 | 182 |
| 15 | Protein translation in synaptic plasticity: mGluR-LTD, Fragile X. Current Opinion in Neurobiology, 2009, 19, 319-326. | 4.2 | 166 |
| 16 | Fragile X Mental Retardation Protein Induces Synapse Loss through Acute Postsynaptic Translational Regulation. Journal of Neuroscience, 2007, 27, 3120-3130. | 3.6 | 156 |
| 17 | Altered Neocortical Rhythmic Activity States inFmr1KO Mice Are Due to Enhanced mGluR5 Signaling and Involve Changes in Excitatory Circuitry. Journal of Neuroscience, 2011, 31, 14223-14234. | 3.6 | 155 |
| 18 | Developmental Switch in Synaptic Mechanisms of Hippocampal Metabotropic Glutamate Receptor-Dependent Long-Term Depression. Journal of Neuroscience, 2005, 25, 2992-3001. | 3.6 | 153 |

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|---|---|---|---|
| 19 | Dysregulation of Mammalian Target of Rapamycin Signaling in Mouse Models of Autism. Journal of Neuroscience, 2015, 35, 13836-13842. | 3.6 | 153 |
| 20 | Multiple Gq-Coupled Receptors Converge on a Common Protein Synthesis-Dependent Long-Term Depression That Is Affected in Fragile X Syndrome Mental Retardation. Journal of Neuroscience, 2007, 27, 11624-11634. | 3.6 | 149 |
| 21 | MEF2C regulates cortical inhibitory and excitatory synapses and behaviors relevant to neurodevelopmental disorders. ELife, 2016, 5, . | 6.0 | 138 |
| 22 | Evidence for a Fragile X Mental Retardation Protein-Mediated Translational Switch in Metabotropic Glutamate Receptor-Triggered Arc Translation and Long-Term Depression. Journal of Neuroscience, 2012, 32, 5924-5936. | 3.6 | 136 |
| 23 | Fragile X Mental Retardation Protein Is Required for Synapse Elimination by the Activity-Dependent Transcription Factor MEF2. Neuron, 2010, 66, 191-197. | 8.1 | 135 |
| 24 | A Mouse Model of the Human Fragile X Syndrome I304N Mutation. PLoS Genetics, 2009, 5, e1000758. | 3.5 | 113 |
| 25 | Increased Expression of the PI3K Enhancer PIKE Mediates Deficits in Synaptic Plasticity and Behavior in Fragile X Syndrome. Cell Reports, 2015, 11, 727-736. | 6.4 | 97 |
| 26 | Experience-Induced Arc/Arg3.1 Primes CA1 Pyramidal Neurons for Metabotropic Glutamate Receptor-Dependent Long-Term Synaptic Depression. Neuron, 2013, 80, 72-79. | 8.1 | 91 |
| 27 | Dysregulation of group-I metabotropic glutamate (mGlu) receptor mediated signalling in disorders associated with Intellectual Disability and Autism. Neuroscience and Biobehavioral Reviews, 2014, 46, 228-241. | 6.1 | 87 |
| 28 | Selective Role of the Catalytic PI3K Subunit p110Î² in Impaired Higher Order Cognition in Fragile X Syndrome. Cell Reports, 2015, 11, 681-688. | 6.4 | 72 |
| 29 | A Target Cell-Specific Role for PresynapticFmr1in Regulating Glutamate Release onto Neocortical Fast-Spiking Inhibitory Neurons. Journal of Neuroscience, 2013, 33, 2593-2604. | 3.6 | 69 |
| 30 | Increased Metabotropic Glutamate Receptor 5 Signaling Underlies Obsessive-Compulsive Disorder-like Behavioral and Striatal Circuit Abnormalities in Mice. Biological Psychiatry, 2016, 80, 522-533. | 1.3 | 63 |
| 31 | FMRP Control of Ribosome Translocation Promotes Chromatin Modifications and Alternative Splicing of Neuronal Genes Linked to Autism. Cell Reports, 2020, 30, 4459-4472.e6. | 6.4 | 63 |
| 32 | A Role for Dendritic mGluR5-Mediated Local Translation of Arc/Arg3.1 in MEF2-Dependent Synapse Elimination. Cell Reports, 2014, 7, 1589-1600. | 6.4 | 58 |
| 33 | Postsynaptic FMRP Promotes the Pruning of Cell-to-Cell Connections among Pyramidal Neurons in the L5A Neocortical Network. Journal of Neuroscience, 2014, 34, 3413-3418. | 3.6 | 56 |
| 34 | Selective Disruption of Metabotropic Glutamate Receptor 5-Homer Interactions Mimics Phenotypes of Fragile X Syndrome in Mice. Journal of Neuroscience, 2016, 36, 2131-2147. | 3.6 | 54 |
| 35 | Elevated CaMKIIÎ± and Hyperphosphorylation of Homer Mediate Circuit Dysfunction in a Fragile X Syndrome Mouse Model. Cell Reports, 2015, 13, 2297-2311. | 6.4 | 51 |
| 36 | Roles for Arc in metabotropic glutamate receptor-dependent LTD and synapse elimination: Implications in health and disease. Seminars in Cell and Developmental Biology, 2018, 77, 51-62. | 5.0 | 46 |

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|---|---|---|---|
| 37 | Selective inhibition of glycogen synthase kinase 3Î± corrects pathophysiology in a mouse model of fragile X syndrome. Science Translational Medicine, 2020, 12, . | 12.4 | 42 |
| 38 | Enhancement of dynamin polymerization and GTPase activity by Arc/Arg3.1. Biochimica Et Biophysica Acta - General Subjects, 2015, 1850, 1310-1318. | 2.4 | 40 |
| 39 | Autism-Associated Chromatin Regulator Brg1/SmarcA4 Is Required for Synapse Development and Myocyte Enhancer Factor 2-Mediated Synapse Remodeling. Molecular and Cellular Biology, 2016, 36, 70-83. | 2.3 | 40 |
| 40 | The fragile Xâ€“cerebellum connection. Trends in Neurosciences, 2006, 29, 183-185. | 8.6 | 39 |
| 41 | Local cortical circuit correlates of altered EEG in the mouse model of Fragile X syndrome. Neurobiology of Disease, 2019, 124, 563-572. | 4.4 | 39 |
| 42 | Audiogenic Seizures in theFmr1Knock-Out Mouse Are Induced byFmr1Deletion in Subcortical, VGlut2-Expressing Excitatory Neurons and Require Deletion in the Inferior Colliculus. Journal of Neuroscience, 2019, 39, 9852-9863. | 3.6 | 38 |
| 43 | Palmitoylation and Membrane Binding of Arc/Arg3.1: A Potential Role in Synaptic Depression. Biochemistry, 2018, 57, 520-524. | 2.5 | 37 |
| 44 | Experience-Dependent and Differential Regulation of Local and Long-Range Excitatory Neocortical Circuits by Postsynaptic Mef2c. Neuron, 2017, 93, 48-56. | 8.1 | 32 |
| 45 | Acamprosate in a mouse model of fragile X syndrome: modulation of spontaneous cortical activity, ERK1/2 activation, locomotor behavior, and anxiety. Journal of Neurodevelopmental Disorders, 2017, 9, 6. | 3.1 | 32 |
| 46 | Induction of NMDA Receptor-Dependent Long-Term Depression in Visual Cortex Does Not Require Metabotropic Glutamate Receptors. Journal of Neurophysiology, 1999, 82, 3594-3597. | 1.8 | 31 |
| 47 | Postsynaptic FMRP bidirectionally regulates excitatory synapses as a function of developmental age and MEF2 activity. Molecular and Cellular Neurosciences, 2013, 56, 39-49. | 2.2 | 27 |
| 48 | APP Causes Hyperexcitability in Fragile X Mice. Frontiers in Molecular Neuroscience, 2016, 9, 147. | 2.9 | 24 |
| 49 | FMRP-dependent Mdm2 dephosphorylation is required for MEF2-induced synapse elimination. Human Molecular Genetics, 2017, 26, ddw386. | 2.9 | 23 |
| 50 | Optimization of ribosome profiling using low-input brain tissue from fragile X syndrome model mice. Nucleic Acids Research, 2019, 47, e25-e25. | 14.5 | 16 |
| 51 | Distinct stages of synapse elimination are induced by burst firing of CA1 neurons and differentially require MEF2A/D. ELife, 2017, 6, . | 6.0 | 16 |
| 52 | Fragile X Syndrome: Molecular Mechanisms of Cognitive Dysfunction. American Journal of Psychiatry, 2007, 164, 556-556. | 7.2 | 12 |
| 53 | Ribosome profiling in mouse hippocampus: plasticity-induced regulation and bidirectional control by TSC2 and FMRP. Molecular Autism, 2020, 11, 78. | 4.9 | 10 |
| 54 | Functional coordination of BET family proteins underlies altered transcription associated with memory impairment in fragile X syndrome. Science Advances, 2021, 7, . | 10.3 | 7 |

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|---|---|---|---|
| 55 | Postsynaptic mGluR5 promotes evoked AMPAR-mediated synaptic transmission onto neocortical layer 2/3 pyramidal neurons during development. Journal of Neurophysiology, 2015, 113, 786-795. | 1.8 | 6 |
| 56 | Synaptic homeostasis: quality vs. quantity. Nature Neuroscience, 2018, 21, 774-776. | 14.8 | 6 |
| 57 | GABAA Alpha 2,3 Modulation Improves Select Phenotypes in a Mouse Model of Fragile X Syndrome. Frontiers in Psychiatry, 2021, 12, 678090. | 2.6 | 6 |
| 58 | Protocadherins and the Social Brain. Biological Psychiatry, 2017, 81, 173-174. | 1.3 | 5 |
| 59 | Experience-dependent weakening of callosal synaptic connections in the absence of postsynaptic FMRP. ELife, 2021, 10, . | 6.0 | 5 |
| 60 | A sound-driven cortical phase-locking change in the Fmr1 KO mouse requires Fmr1 deletion in a subpopulation of brainstem neurons. Neurobiology of Disease, 2022, 170, 105767. | 4.4 | 4 |
| 61 | Editorial: Latest Advances on Excitatory Synapse Biology. Frontiers in Synaptic Neuroscience, 2021, 13, 768651. | 2.5 | 1 |