

Thomas D Mueller

List of Publications by Year in descending order

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Version: 2024-02-01

62
papers

3,517
citations

212478

28
h-index

156644

58
g-index

63
all docs

63
docs citations

63
times ranked

5350
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Structural Biology and Evolution of the TGF- β Family. Cold Spring Harbor Perspectives in Biology, 2016, 8, a022103. | 2.3 | 267 |
| 2 | Promiscuity and specificity in BMP receptor activation. FEBS Letters, 2012, 586, 1846-1859. | 1.3 | 252 |
| 3 | Molecular recognition of BMP-2 and BMP receptor IA. Nature Structural and Molecular Biology, 2004, 11, 481-488. | 3.6 | 193 |
| 4 | Structural insights into BMP receptors: Specificity, activation and inhibition. Cytokine and Growth Factor Reviews, 2016, 27, 13-34. | 3.2 | 187 |
| 5 | Salt Stress Triggers Phosphorylation of the Arabidopsis Vacuolar K ⁺ Channel TPK1 by Calcium-Dependent Protein Kinases (CDPKs). Molecular Plant, 2013, 6, 1274-1289. | 3.9 | 152 |
| 6 | TGF- β family co-receptor function and signaling. Acta Biochimica Et Biophysica Sinica, 2018, 50, 12-36. | 0.9 | 150 |
| 7 | Distinct Modes of Inhibition by Sclerostin on Bone Morphogenetic Protein and Wnt Signaling Pathways. Journal of Biological Chemistry, 2010, 285, 41614-41626. | 1.6 | 149 |
| 8 | Exogenous TNFR2 activation protects from acute GvHD via host T reg cell expansion. Journal of Experimental Medicine, 2016, 213, 1881-1900. | 4.2 | 143 |
| 9 | A Single Residue of GDF-5 Defines Binding Specificity to BMP Receptor IB. Journal of Molecular Biology, 2005, 349, 933-947. | 2.0 | 135 |
| 10 | Molecular recognition in bone morphogenetic protein (BMP)/receptor interaction. Biological Chemistry, 2004, 385, 697-710. | 1.2 | 130 |
| 11 | Cumulin, an Oocyte-secreted Heterodimer of the Transforming Growth Factor- β Family, Is a Potent Activator of Granulosa Cells and Improves Oocyte Quality. Journal of Biological Chemistry, 2015, 290, 24007-24020. | 1.6 | 130 |
| 12 | A silent H-bond can be mutationally activated for high-affinity interaction of BMP-2 and activin type IIB receptor. BMC Structural Biology, 2007, 7, 6. | 2.3 | 129 |
| 13 | Receptor oligomerization and beyond: a case study in bone morphogenetic proteins. BMC Biology, 2009, 7, 59. | 1.7 | 116 |
| 14 | Crystal Structure Analysis Reveals How the Chordin Family Member Crossveinless 2 Blocks BMP-2 Receptor Binding. Developmental Cell, 2008, 14, 739-750. | 3.1 | 108 |
| 15 | Type I receptor binding of bone morphogenetic protein-6 is dependent on N-glycosylation of the ligand. FEBS Journal, 2008, 275, 172-183. | 2.2 | 92 |
| 16 | Specification of BMP Signaling. Cells, 2019, 8, 1579. | 1.8 | 90 |
| 17 | Intricacies of BMP receptor assembly. Cytokine and Growth Factor Reviews, 2009, 20, 367-377. | 3.2 | 85 |
| 18 | NMR structure of the Wnt modulator protein Sclerostin. Biochemical and Biophysical Research Communications, 2009, 380, 160-165. | 1.0 | 72 |

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|----|--|-----|-----------|
| 19 | The Nonspecific Lipid Transfer Protein AtLtp1-4 Is Involved in Suberin Formation of <i>Arabidopsis thaliana</i> Crown Galls. <i>Plant Physiology</i> , 2016, 172, 1911-1927. | 2.3 | 54 |
| 20 | A modular interface of IL-4 allows for scalable affinity without affecting specificity for the IL-4 receptor. <i>BMC Biology</i> , 2006, 4, 13. | 1.7 | 52 |
| 21 | First missense mutation in the SOST gene causing sclerosteosis by loss of sclerostin function. <i>Human Mutation</i> , 2010, 31, E1526-E1543. | 1.1 | 52 |
| 22 | Structure and Function of TPC1 Vacuole SV Channel Gains Shape. <i>Molecular Plant</i> , 2018, 11, 764-775. | 3.9 | 52 |
| 23 | Structure Analysis of Bone Morphogenetic Protein-2 Type I Receptor Complexes Reveals a Mechanism of Receptor Inactivation in Juvenile Polyposis Syndrome. <i>Journal of Biological Chemistry</i> , 2008, 283, 5876-5887. | 1.6 | 51 |
| 24 | Anti-Sclerostin Antibody Inhibits Internalization of Sclerostin and Sclerostin-Mediated Antagonism of Wnt/LRP6 Signaling. <i>PLoS ONE</i> , 2013, 8, e62295. | 1.1 | 51 |
| 25 | Structure Analysis of the IL-5 Ligand-Receptor Complex Reveals a Wrench-like Architecture for IL-5R β . <i>Structure</i> , 2011, 19, 1864-1875. | 1.6 | 42 |
| 26 | GDF-5 can act as a context-dependent BMP-2 antagonist. <i>BMC Biology</i> , 2015, 13, 77. | 1.7 | 39 |
| 27 | A supernumerary B-sex chromosome drives male sex determination in the Pach $\tilde{3}$ n cavefish, <i>Astyanax mexicanus</i> . <i>Current Biology</i> , 2021, 31, 4800-4809.e9. | 1.8 | 34 |
| 28 | Identification of a Novel TGF- β -Binding Site in the Zona Pellucida C-terminal (ZP-C) Domain of TGF- β -Receptor-3 (TGFR-3). <i>PLoS ONE</i> , 2013, 8, e67214. | 1.1 | 33 |
| 29 | Site-Directed Immobilization of BMP-2: Two Approaches for the Production of Innovative Osteoinductive Scaffolds. <i>Biomacromolecules</i> , 2017, 18, 695-708. | 2.6 | 32 |
| 30 | BMP15 Mutations Associated With Primary Ovarian Insufficiency Reduce Expression, Activity, or Synergy With GDF9. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2017, 102, 1009-1019. | 1.8 | 31 |
| 31 | New insights into the molecular mechanism of multiple synostoses syndrome (SYNS): Mutation within the GDF5 knuckle epitope causes noggin-resistance. <i>Journal of Bone and Mineral Research</i> , 2012, 27, 429-442. | 3.1 | 30 |
| 32 | Acidosis-induced activation of anion channel SLAH3 in the flooding-related stress response of <i>Arabidopsis</i> . <i>Current Biology</i> , 2021, 31, 3575-3585.e9. | 1.8 | 29 |
| 33 | Rat Organic Cation Transporter 1 Contains Three Binding Sites for Substrate 1-Methyl-4-phenylpyridinium per Monomer. <i>Molecular Pharmacology</i> , 2019, 95, 169-182. | 1.0 | 28 |
| 34 | Bioresponsive release of insulin-like growth factor-I from its PEGylated conjugate. <i>Journal of Controlled Release</i> , 2018, 279, 17-28. | 4.8 | 27 |
| 35 | Mutational Analysis of Sclerostin Shows Importance of the Flexible Loop and the Cystine-Knot for Wnt-Signaling Inhibition. <i>PLoS ONE</i> , 2013, 8, e81710. | 1.1 | 27 |
| 36 | Collagen I derived recombinant protein microspheres as novel delivery vehicles for bone morphogenetic protein-2. <i>Materials Science and Engineering C</i> , 2018, 84, 271-280. | 3.8 | 24 |

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|----|--|-----|-----------|
| 37 | Growth differentiation factor 9:bone morphogenetic protein 15 (GDF9:BMP15) synergism and protein heterodimerization. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2257. | 3.3 | 23 |
| 38 | Homozygous missense and nonsense mutations in BMPR1B cause acromesomelic chondrodysplasia-type Grebe. European Journal of Human Genetics, 2014, 22, 726-733. | 1.4 | 23 |
| 39 | A hypomorphic BMPR1B mutation causes du Pan acromesomelic dysplasia. Orphanet Journal of Rare Diseases, 2015, 10, 84. | 1.2 | 18 |
| 40 | Repulsive guidance molecules lock growth differentiation factor 5 in an inhibitory complex. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15620-15631. | 3.3 | 18 |
| 41 | Assay Conditions Influence Affinities of Rat Organic Cation Transporter 1: Analysis of Mutagenesis in the Modeled Outward-Facing Cleft by Measuring Effects of Substrates and Inhibitors on Initial Uptake. Molecular Pharmacology, 2018, 93, 402-415. | 1.0 | 17 |
| 42 | Modifications of Human Growth Differentiation Factor 9 to Improve the Generation of Embryos From Low Competence Oocytes. Molecular Endocrinology, 2015, 29, 40-52. | 3.7 | 16 |
| 43 | Stabilization of desmoglein-2 binding rescues arrhythmia in arrhythmogenic cardiomyopathy. JCI Insight, 2020, 5, . | 2.3 | 16 |
| 44 | RGM co-receptors add complexity to BMP signaling. Nature Structural and Molecular Biology, 2015, 22, 439-440. | 3.6 | 15 |
| 45 | The sclerostin-neutralizing antibody AbD09097 recognizes an epitope adjacent to sclerostin's binding site for the Wnt co-receptor LRP6. Open Biology, 2016, 6, 160120. | 1.5 | 12 |
| 46 | A Selection Fit Mechanism in BMP Receptor IA as a Possible Source for BMP Ligand-Receptor Promiscuity. PLoS ONE, 2010, 5, e13049. | 1.1 | 10 |
| 47 | Mechanisms of BMP Receptor Interaction and Activation. Vitamins and Hormones, 2015, 99, 1-61. | 0.7 | 10 |
| 48 | Low doses of cholera toxin and its mediator cAMP induce CTLA-2 secretion by dendritic cells to enhance regulatory T cell conversion. PLoS ONE, 2017, 12, e0178114. | 1.1 | 10 |
| 49 | The Clip-Segment of the von Willebrand Domain 1 of the BMP Modulator Protein Crossveinless 2 Is Preformed. Molecules, 2013, 18, 11658-11682. | 1.7 | 9 |
| 50 | Purification, crystallization and preliminary data analysis of ligand-receptor complexes of growth and differentiation factor 5 (GDF5) and BMP receptor IB (BRIB). Acta Crystallographica Section F: Structural Biology Communications, 2009, 65, 779-783. | 0.7 | 8 |
| 51 | Protein RS1 (<i>RSC1A1</i>) Downregulates the Exocytotic Pathway of Glucose Transporter SGLT1 at Low Intracellular Glucose via Inhibition of Ornithine Decarboxylase. Molecular Pharmacology, 2016, 90, 508-521. | 1.0 | 8 |
| 52 | Molecular basis of cytokine signalling theme and variations. FEBS Journal, 2010, 277, 106-118. | 2.2 | 5 |
| 53 | An Activating Deletion Variant in the Submembrane Region of Natriuretic Peptide Receptor-B Causes Tall Stature. Journal of Clinical Endocrinology and Metabolism, 2020, 105, 2354-2366. | 1.8 | 5 |
| 54 | Crystallization and preliminary X-ray diffraction analysis of human growth and differentiation factor 5 (GDF-5). Acta Crystallographica Section F: Structural Biology Communications, 2005, 61, 134-136. | 0.7 | 4 |

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|----|---|-----|-----------|
| 55 | The hypervariable region 4 (HV4) and position 93 of the α chain modulate CD1d-glycolipid binding of iNKT TCRs. <i>European Journal of Immunology</i> , 2015, 45, 2122-2133. | 1.6 | 4 |
| 56 | Structural Basis of Interleukin-5 Inhibition by the Small Cyclic Peptide AF17121. <i>Journal of Molecular Biology</i> , 2019, 431, 714-731. | 2.0 | 4 |
| 57 | A nonfunctional copy of the salmonid sex-determining gene (<i>sdY</i>) is responsible for the α -apparent XY females in Chinook salmon, <i>Oncorhynchus tshawytscha</i> . <i>G3: Genes, Genomes, Genetics</i> , 2022, 12, . | 0.8 | 3 |
| 58 | Site-Directed Immobilization of an Engineered Bone Morphogenetic Protein 2 (BMP2) Variant to Collagen-Based Microspheres Induces Bone Formation In Vivo. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3928. | 1.8 | 3 |
| 59 | Purification, crystallization and preliminary data analysis of the ligand-receptor complex of the growth and differentiation factor 5 variant R57A (GDF5R57A) and BMP receptor IA (BRIA). <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2011, 67, 551-555. | 0.7 | 2 |
| 60 | Crystallization and preliminary X-ray crystallographic analysis of the sclerostin-neutralizing Fab AbD09097. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2015, 71, 388-392. | 0.4 | 2 |
| 61 | Optimized expression and purification of a soluble BMP2 variant based on in-silico design. <i>Protein Expression and Purification</i> , 2021, 186, 105918. | 0.6 | 2 |
| 62 | Crystallization and preliminary X-ray analysis of the complex of the first von Willebrand type C domain bound to bone morphogenetic protein 2. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2008, 64, 307-312. | 0.7 | 1 |