

# Ulrike Meier Yang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9831668/publications.pdf>

Version: 2024-02-01

21  
papers

1,539  
citations

932766

10  
h-index

1125271

13  
g-index

21  
all docs

21  
docs citations

21  
times ranked

1010  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | BoomerAMG: A parallel algebraic multigrid solver and preconditioner. Applied Numerical Mathematics, 2002, 41, 155-177.   | 1.2 | 642       |
| 2  | The Design and Implementation of hypre, a Library of Parallel High Performance Preconditioners. , 2006, , 267-294.   |     | 159       |
| 3  | Reducing Complexity in Parallel Algebraic Multigrid Preconditioners. SIAM Journal on Matrix Analysis and Applications, 2006, 27, 1019-1039.                            | 0.7 | 147       |
| 4  | Multigrid Smoothers for Ultraparallel Computing. SIAM Journal of Scientific Computing, 2011, 33, 2864-2887.  | 1.3 | 113       |
| 5  | Distance-two interpolation for parallel algebraic multigrid. Numerical Linear Algebra With Applications, 2008, 15, 115-139.  | 0.9 | 78        |
| 6  | Pursuing scalability for hypre 's conceptual interfaces. ACM Transactions on Mathematical Software, 2005, 31, 326-350.   | 1.6 | 67        |
| 7  | Scaling Hypre's Multigrid Solvers to 100,000 Cores. , 2012, , 261-279.   |     | 60        |
| 8  | Modeling the performance of an algebraic multigrid cycle on HPC platforms. , 2011, , .   |     | 59        |
| 9  | Parallel Algebraic Multigrid Methods " High Performance Preconditioners. , 2006, , 209-236.  |     | 42        |
| 10 | On the use of relaxation parameters in hybrid smoothers. Numerical Linear Algebra With Applications, 2004, 11, 155-172.  | 0.9 | 32        |
| 11 | On long-range interpolation operators for aggressive coarsening. Numerical Linear Algebra With Applications, 2010, 17, 453-472.  | 0.9 | 27        |
| 12 | Conceptual interfaces in hypre. Future Generation Computer Systems, 2006, 22, 239-251.   | 4.9 | 21        |
| 13 | Reducing communication in algebraic multigrid using additive variants. Numerical Linear Algebra With Applications, 2014, 21, 275-296.                                  | 0.9 | 21        |
| 14 | Modeling the Performance of an Algebraic Multigrid Cycle Using Hybrid MPI/OpenMP. , 2012, , .  |     | 18        |
| 15 | High-performance algebraic multigrid solver optimized for multi-core based distributed parallel systems. , 2015, , .   |     | 16        |
| 16 | Scalability of Classical Algebraic Multigrid for Elasticity to Half a Million Parallel Tasks. Lecture Notes in Computational Science and Engineering, 2016, , 113-140. | 0.1 | 13        |
| 17 | Porting hypre to heterogeneous computer architectures: Strategies and experiences. Parallel Computing, 2021, 108, 102840.  | 1.3 | 8         |
| 18 | A New Class of AMG Interpolation Methods Based on Matrix-Matrix Multiplications. SIAM Journal of Scientific Computing, 2021, 43, S540-S564.                            | 1.3 | 6         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Performance Modeling of Algebraic Multigrid on Blue Gene/Q: Lessons Learned. , 2012, , .                                       |     | 5         |
| 20 | Systematic Reduction of Data Movement in Algebraic Multigrid Solvers. , 2013, , .  |     | 3         |
| 21 | Algebraic Multigrid on a Dragonfly Network: First Experiences on a Cray XC30. Lecture Notes in Computer Science, 2015, , 3-23. | 1.0 | 2         |