## **Andreas Ulbig**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/399235/publications.pdf

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43 papers

2,668 citations

759055 12 h-index 14 g-index

43 all docs 43 docs citations

43 times ranked 2786 citing authors

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Modeling of Lithium-Ion Battery Degradation for Cell Life Assessment. IEEE Transactions on Smart Grid, 2018, 9, 1131-1140.   | 6.2 | 600       |
| 2  | Impact of Low Rotational Inertia on Power System Stability and Operation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7290-7297.          | 0.4 | 486       |
| 3  | Analyzing operational flexibility of electric power systems. International Journal of Electrical Power and Energy Systems, 2015, 72, 155-164.  | 3.3 | 226       |
| 4  | Review of grid applications with the Zurich 1MW battery energy storage system. Electric Power Systems Research, 2015, 120, 128-135.  | 2.1 | 153       |
| 5  | Reducing peak electricity demand in building climate control using real-time pricing and model predictive control. , 2010, , .   |     | 135       |
| 6  | Unified System-Level Modeling of Intermittent Renewable Energy Sources and Energy Storage for Power System Operation. IEEE Systems Journal, 2012, 6, 140-151.                        | 2.9 | 127       |
| 7  | Defining a degradation cost function for optimal control of a battery energy storage system. , 2013, , .   |     | 105       |
| 8  | Optimal Placement and Sizing of Distributed Battery Storage in Low Voltage Grids Using Receding Horizon Control Strategies. IEEE Transactions on Power Systems, 2018, 33, 2383-2394. | 4.6 | 96        |
| 9  | On operational flexibility in power systems. , 2012, , .   |     | 74        |
| 10 | Power and energy capacity requirements of storages providing frequency control reserves., 2013,,.  |     | 63        |
| 11 | BESS Control Strategies for Participating in Grid Frequency Regulation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4024-4029.            | 0.4 | 55        |
| 12 | Empirical Analysis of the Merit-Order Effect and the Missing Money Problem in Power Markets With High RES Shares. IEEE Transactions on Power Systems, 2015, 30, 1560-1570.           | 4.6 | 54        |
| 13 | Energy storage in power system operation: The power nodes modeling framework. , 2010, , .  |     | 53        |
| 14 | Analyzing Rotational Inertia, Grid Topology and their Role for Power System Stability. IFAC-PapersOnLine, 2015, 48, 541-547.   | 0.5 | 41        |
| 15 | Analyzing operational flexibility of electric power systems. , 2014, , .   |     | 38        |
| 16 | Predictive control for real-time frequency regulation and rotational inertia provision in power systems. , 2013, , .   |     | 33        |
| 17 | Explicit nonlinear predictive control for a magnetic levitation system. Asian Journal of Control, 2010, 12, 434-442.   | 1.9 | 26        |
| 18 | General frequency control with aggregated control reserve capacity from time-varying sources: The case of PHEVs. , 2010, , .   |     | 26        |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Impacts of dynamic line rating on power dispatch performance and grid integration of renewable energy sources. , $2013$ , , .   |     | 25        |
| 20 | Framework for Multiple Time-Scale Cascaded MPC Application in Power Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10472-10480.              | 0.4 | 23        |
| 21 | Building control and storage management with dynamic tariffs for shaping demand response., 2011,,.  |     | 21        |
| 22 | Forecasting of Smart Meter Time Series Based on Neural Networks. Lecture Notes in Computer Science, 2017, , 10-21.  | 1.0 | 20        |
| 23 | Optimal planning of distribution grids considering active power curtailment and reactive power control. , 2016, , .   |     | 18        |
| 24 | A new frequency control reserve framework based on energy-constrained units. , 2014, , .  |     | 15        |
| 25 | Explicit solutions for nonlinear model predictive control: A linear mapping approach. , 2007, , .   |     | 14        |
| 26 | Electricity grid in-feed from renewable sources: A risk for pumped-storage hydro plants?., 2011,,.  |     | 13        |
| 27 | Towards an optimal activation pattern of tertiary control reserves in the power system of Switzerland., 2012,,.   |     | 13        |
| 28 | Towards variable end-consumer electricity tariffs reflecting marginal costs: A benchmark tariff. , 2010, , .  |     | 12        |
| 29 | Grid-constrained optimal predictive power dispatch in large multi-level power systems with renewable energy sources, and storage devices. , 2014, , .   |     | 12        |
| 30 | Impact of Frequency Control Reserve Provision by Storage Systems on Power System Operation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4038-4043. | 0.4 | 12        |
| 31 | Nâ^1 security assessment incorporating the flexibility offered by dynamic line rating. , 2016, , .  |     | 12        |
| 32 | Impacts of forecast accuracy on grid integration of renewable energy sources. , 2013, , .   |     | 11        |
| 33 | Generating Stochastic Residential Load Profiles from Smart Meter Data for an Optimal Power Matching at an Aggregate Level. , 2018, , .  |     | 10        |
| 34 | The role of aggregation in power system simulation. , 2015, , .   |     | 9         |
| 35 | Revisiting the merit-order effect of renewable energy sources. , 2015, , .  |     | 8         |
| 36 | Unsupervised Learning Methods for Power System Data Analysis. , 2018, , 107-124.  |     | 6         |

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| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Assessment of capacity factor and dispatch flexibility of concentrated solar power units. , 2013, , .   |     | 5         |
| 38 | Operational Flexibility of Power Systems. , 2017, , 201-216.  |     | 5         |
| 39 | Role of Power System Flexibility. , 2014, , 227-238.  |     | 4         |
| 40 | Model Predictive Frequency Control employing stability constraints., 2015,,.  |     | 4         |
| 41 | Grid integration costs of fluctuating renewable energy sources. , 2014, , .   |     | 3         |
| 42 | Explicit model predictive control for a magnetic levitation system. , 2008, , .   |     | 1         |
| 43 | Towards more cost-effective PV connection request assessments via time-series-based grid simulation and analysis. CIRED - Open Access Proceedings Journal, 2017, 2017, 2560-2563. | 0.1 | 1         |