# Kyri Baker

## List of Publications by Year
## in descending order

| | | | |
|---|---|---|---|
| 42 papers | 1,294 citations | 687363<br>13 h-index | 888059<br>17 g-index |
| 44 all docs | 44 docs citations | 44 times ranked | 1342 citing authors |

| # | ARTICLE | IF | CITATIONS |
|---|---------|-----|-----------|
| 1 | Energy Storage Sizing Taking Into Account Forecast Uncertainties and Receding Horizon Operation. IEEE Transactions on Sustainable Energy, 2017, 8, 331-340. | 8.8 | 151 |
| 2 | Foresee: A user-centric home energy management system for energy efficiency and demand response. Applied Energy, 2017, 205, 1583-1595. | 10.1 | 140 |
| 3 | Chance-Constrained AC Optimal Power Flow for Distribution Systems With Renewables. IEEE Transactions on Power Systems, 2017, 32, 3427-3438. | 6.5 | 121 |
| 4 | Network-Cognizant Voltage Droop Control for Distribution Grids. IEEE Transactions on Power Systems, 2018, 33, 2098-2108. | 6.5 | 94 |
| 5 | Data-Based Distributionally Robust Stochastic Optimal Power Flow—Part I: Methodologies. IEEE Transactions on Power Systems, 2019, 34, 1483-1492. | 6.5 | 85 |
| 6 | Distributed MPC for Efficient Coordination of Storage and Renewable Energy Sources Across Control Areas. IEEE Transactions on Smart Grid, 2016, 7, 992-1001. | 9.0 | 71 |
| 7 | Learning Optimal Solutions for Extremely Fast AC Optimal Power Flow. , 2020, , . | | 56 |
| 8 | Joint Chance Constraints in AC Optimal Power Flow: Improving Bounds Through Learning. IEEE Transactions on Smart Grid, 2019, 10, 6376-6385. | 9.0 | 47 |
| 9 | Data-Based Distributionally Robust Stochastic Optimal Power Flow—Part II: Case Studies. IEEE Transactions on Power Systems, 2019, 34, 1493-1503. | 6.5 | 38 |
| 10 | Learning Warm-Start Points For Ac Optimal Power Flow. , 2019, , . | | 37 |
| 11 | Evaluation of low-exergy heating and cooling systems and topology optimization for deep energy savings at the urban district level. Energy Conversion and Management, 2020, 222, 113106. | 9.2 | 37 |
| 12 | Efficient relaxations for joint chance constrained AC optimal power flow. Electric Power Systems Research, 2017, 148, 230-236. | 3.6 | 35 |
| 13 | Modeling stationary lithium-ion batteries for optimization and predictive control. , 2017, , . | | 30 |
| 14 | Convex Relaxation of Grid-Connected Energy Storage System Models With Complementarity Constraints in DC OPF. IEEE Transactions on Smart Grid, 2020, 11, 4070-4079. | 9.0 | 25 |
| 15 | Stochastic Model Predictive Control for Demand Response in a Home Energy Management System. , 2018, , . | | 24 |
| 16 | Distribution-agnostic stochastic optimal power flow for distribution grids. , 2016, , . | | 21 |
| 17 | Assessments of data centers for provision of frequency regulation. Applied Energy, 2020, 277, 115621. | 10.1 | 19 |
| 18 | Optimal storage sizing using two-stage stochastic optimization for intra-hourly dispatch. , 2014, , . | | 18 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 19 | Optimal integration of intermittent energy sources using distributed multi-step optimization. , 2012, , . | | 17 |
| 20 | Learning-Accelerated ADMM for Distributed DC Optimal Power Flow. , 2022, 6, 1-6. | | 17 |
| 21 | Optimal Renewable Resource Allocation and Load Scheduling of Resilient Communities. Energies, 2020, 13, 5683. | 3.1 | 16 |
| 22 | Locational sensitivity investigation on PV hosting capacity and fast track PV screening. , 2016, , . | | 14 |
| 23 | User-preference-driven model predictive control of residential building loads and battery storage for demand response. , 2017, , . | | 14 |
| 24 | Stochastic Optimal Power Flow Based on Data-Driven Distributionally Robust Optimization. , 2018, , . | | 13 |
| 25 | Enforcing Policy Feasibility Constraints through Differentiable Projection for Energy Optimization. , 2021, , . | | 13 |
| 26 | An optimization framework for the network design of advanced district thermal energy systems. Energy Conversion and Management, 2022, 266, 115839. | 9.2 | 10 |
| 27 | Incentive-based voltage regulation in distribution networks. , 2017, , . | | 7 |
| 28 | Consumer privacy protection using flexible thermal loads: Theoretical limits and practical considerations. Applied Energy, 2021, 281, 116075. | 10.1 | 7 |
| 29 | Inclusion of inter-temporal constraints into a distributed Newton-Raphson method. , 2012, , . | | 6 |
| 30 | Frequency Regulation Services from Connected Residential Devices. , 2016, , . | | 6 |
| 31 | JOINT CHANCE CONSTRAINTS REDUCTION THROUGH LEARNING IN ACTIVE DISTRIBUTION NETWORKS. , 2018, , . | | 6 |
| 32 | Optimal power flow for distribution systems under uncertain forecasts. , 2016, , . | | 5 |
| 33 | Jacobian singularities in optimal power flow problems caused by intertemporal constraints. , 2013, , . | | 4 |
| 34 | Network-cognizant design of decentralized Volt/VAR controllers. , 2017, , . | | 4 |
| 35 | Sensitivity Analysis of Photovoltaic System Design Parameters to Passively Mitigate Ramp Rates. IEEE Journal of Photovoltaics, 2021, 11, 545-551. | 2.5 | 3 |
| 36 | The Role of Demand-Side Flexibility in Hedging Electricity Price Volatility in Distribution Grids. , 2019, , . | | 2 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 37 | OPF-Learn: An Open-Source Framework for Creating Representative AC Optimal Power Flow Datasets. , 2022, , . | | 2 |
| 38 | A Coordination Mechanism For Reducing Price Spikes in Distribution Grids. Energies, 2020, 13, 2500. | 3.1 | 1 |
| 39 | Optimal Sizing of an Energy Storage Portfolio Considering Multiple Timescales. , 2021, , . | | 1 |
| 40 | Incorporating thermoelectric power plant water use into multi-objective optimal power flow. Environmental Research: Infrastructure and Sustainability, 0, , . | 2.3 | 1 |
| 41 | MAFSA: Mars Autonomous and Foldable Solar Array. New Space, 2018, 6, 308-319. | 0.8 | 0 |
| 42 | Dymola-Enabled Reinforcement Learning for Real-time Generator Set-point Optimization. , 2022, , . | | 0 |