

Chresten TrÃholt

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8445159/publications.pdf>

Version: 2024-02-01

105
papers

3,290
citations

201674

27
h-index

175258

52
g-index

105
all docs

105
docs citations

105
times ranked

2918
citing authors

#	ARTICLE	IF	CITATIONS
1	The crystal structure of the γ phase in Al-Mg-Si alloys. Acta Materialia, 1998, 46, 3283-3298.	7.9	558
2	Superconducting wind turbine generators. Superconductor Science and Technology, 2010, 23, 034019.	3.5	184
3	A Decentralized Storage Strategy for Residential Feeders With Photovoltaics. IEEE Transactions on Smart Grid, 2014, 5, 974-981.	9.0	168
4	Distribution System Services Provided by Electric Vehicles: Recent Status, Challenges, and Future Prospects. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 4277-4296.	8.0	110
5	Triaxial HTS Cable for the AEP Bixby Project. IEEE Transactions on Applied Superconductivity, 2007, 17, 2047-2050.	1.7	99
6	Demand profile study of battery electric vehicle under different charging options. , 2012, , .		95
7	Flexibility of combined heat and power plants: A review of technologies and operation strategies. Applied Energy, 2019, 252, 113445.	10.1	91
8	Loss and inductance investigations in a 4-layer superconducting prototype cable conductor. IEEE Transactions on Applied Superconductivity, 1999, 9, 833-836.	1.7	89
9	Optimization under uncertainty of a biomass-integrated renewable energy microgrid with energy storage. Renewable Energy, 2018, 123, 204-217.	8.9	87
10	Towards Faster FEM Simulation of Thin Film Superconductors: A Multiscale Approach. IEEE Transactions on Applied Superconductivity, 2011, 21, 3273-3276.	1.7	85
11	EV Charging Facilities and Their Application in LV Feeders With Photovoltaics. IEEE Transactions on Smart Grid, 2013, 4, 1533-1540.	9.0	85
12	Optimization of a biomass-integrated renewable energy microgrid with demand side management under uncertainty. Applied Energy, 2018, 230, 836-844.	10.1	80
13	Supporting involvement of electric vehicles in distribution grids: Lowering the barriers for a proactive integration. Energy, 2017, 134, 458-468.	8.8	78
14	Electric vehicle fleet integration in the danish EDISON project - A virtual power plant on the island of Bornholm. , 2010, , .		69
15	Investigation of real-time flexibility of combined heat and power plants in district heating applications. Applied Energy, 2019, 237, 196-209.	10.1	68
16	Stacking sequence of YBa ₂ Cu ₃ O ₇ thin film on SrTiO ₃ substrate. Physica C: Superconductivity and Its Applications, 1993, 205, 354-362.	1.2	64
17	Formation of edge dislocations in thin epitaxial YBCO films. IEEE Transactions on Applied Superconductivity, 1997, 7, 1396-1398.	1.7	61
18	Design Study of 10 kW Superconducting Generator for Wind Turbine Applications. IEEE Transactions on Applied Superconductivity, 2009, 19, 1678-1682.	1.7	59

#	ARTICLE	IF	CITATIONS
19	Metallic interlayers between steel and diamond-like carbon. Surface and Coatings Technology, 1994, 68-69, 651-655.	4.8	57
20	Improvement of Local Voltage in Feeders With Photovoltaic Using Electric Vehicles. IEEE Transactions on Power Systems, 2013, 28, 3515-3516.	6.5	55
21	High resolution electron microscopy of heavy-ion induced defects in superconducting Bi-2212 thin films in relation to their effect on J _c . Physica C: Superconductivity and Its Applications, 1996, 268, 161-172.	1.2	45
22	Growth mechanisms of coevaporated SmBa ₂ Cu ₃ O _y thin films. Physical Review B, 1995, 52, 7604-7618.	3.2	43
23	A review of Danish integrated multi-energy system flexibility options for high wind power penetration. Clean Energy, 2017, 1, 23-35.	3.2	42
24	Facilitating a Generic Communication Interface to Distributed Energy Resources: Mapping IEC 61850 to RESTful Services. , 2010, , .		37
25	Tests of Tri-Axial HTS Cables. IEEE Transactions on Applied Superconductivity, 2005, 15, 1827-1830.	1.7	35
26	Evaluation of a Generic Virtual Power Plant framework using service oriented architecture. , 2008, , .		35
27	A market-based Virtual Power Plant. , 2009, , .		35
28	On the ease of being green: An investigation of the inconvenience of electric vehicle charging. Applied Energy, 2020, 258, 114090.	10.1	35
29	A HREM study of the atomic structure and the growth mechanism at the YBa ₂ Cu ₃ O ₇ /YSZ interface. Physica C: Superconductivity and Its Applications, 1993, 218, 29-42.	1.2	34
30	Thin film growth of the charge density wave oxide Rb _{0.30} MoO ₃ . Applied Physics Letters, 1996, 68, 3823-3825.	3.3	33
31	Enhanced flux pinning in Bi-2212 single crystals by planar defects introduced via Ti-substitution. Physica C: Superconductivity and Its Applications, 1997, 274, 197-203.	1.2	32
32	Direct high-resolution electron microscopy observation of nonunit cell nucleation in the initial stage of high-T _c superconducting film growth. Applied Physics Letters, 1995, 66, 1830-1832.	3.3	30
33	Assessment of economic benefits for EV owners participating in the primary frequency regulation markets. International Journal of Electrical Power and Energy Systems, 2020, 120, 105985.	5.5	28
34	Test results of full-scale HTS cable models and plans for a 36 kV, 2 kA/sub rms/ utility demonstration. IEEE Transactions on Applied Superconductivity, 2001, 11, 2473-2476.	1.7	27
35	Operation experiences with a 30 kV/100 MVA high temperature superconducting cable system. Superconductor Science and Technology, 2004, 17, S101-S105.	3.5	26
36	Optimal design of DC fast-charging stations for EVs in low voltage grids. , 2017, , .		26

#	ARTICLE	IF	CITATIONS
37	Nanostructural characterization of interfaces of thin films of YBa ₂ Cu ₃ O ₇ with various kinds of substrates. <i>Journal of Alloys and Compounds</i> , 1993, 195, 85-92.	5.5	24
38	Analysis of voltage support by electric vehicles and photovoltaic in a real Danish low voltage network. , 2014, , .		24
39	Solid state amorphization in Niâ€Ti systems: the effect of structure on the kinetics of interface and grain-boundary amorphization. <i>Acta Materialia</i> , 1998, 46, 5491-5508.	7.9	23
40	Average behavior of battery-electric vehicles for distributed energy studies. , 2010, , .		23
41	Microstructures of ramp-edge YBa ₂ Cu ₃ O _x /PrBa ₂ Cu ₃ O _x /YBa ₂ Cu ₃ O _x Josephson junctions on different substrates. <i>Physica C: Superconductivity and Its Applications</i> , 1995, 255, 293-305.	1.2	22
42	First operation experiences from a 30 kV, 104 MVA HTS power cable installed in a utility substation. <i>Physica C: Superconductivity and Its Applications</i> , 2002, 372-376, 1571-1579.	1.2	22
43	Alternating current losses of a 10 metre long low loss superconducting cable conductor determined from phase sensitive measurements. <i>Superconductor Science and Technology</i> , 1999, 12, 360-365.	3.5	19
44	Multi-timescale coordinated operation of a CHP plant-wind farm portfolio considering multiple uncertainties. <i>International Journal of Electrical Power and Energy Systems</i> , 2021, 125, 106428.	5.5	19
45	Thin films of the charge-density-wave oxide Rb _{0.30} MoO ₃ by pulsed-laser deposition. <i>Physical Review B</i> , 1997, 55, 4817-4824.	3.2	16
46	Electric vehicle smart charging using dynamic price signal. , 2014, , .		16
47	Implementation and demonstration of grid frequency support by V2G enabled electric vehicle. , 2014, , .		15
48	The relation between the defect structure, the surface roughness and the growth conditions of YBa ₂ Cu ₃ O ₇ â€ films. <i>Journal of Alloys and Compounds</i> , 1997, 251, 27-30.	5.5	14
49	Overcurrent experiments on HTS tape and cable conductor. <i>IEEE Transactions on Applied Superconductivity</i> , 2001, 11, 1781-1784.	1.7	13
50	Electric vehicle requirements for operation in smart grids. , 2011, , .		13
51	A framework for techno-economic assessment of demand-side power-to-heat solutions in low-temperature district heating. <i>International Journal of Electrical Power and Energy Systems</i> , 2020, 122, 106096.	5.5	13
52	Optimal design and operating strategies for a biomass-fueled combined heat and power system with energy storage. <i>Energy</i> , 2018, 155, 620-629.	8.8	12
53	DC Fast-charging stations for EVs controlled by a local battery storage in low voltage grids. , 2017, , .		10
54	Calorimetric measurements of losses in HTS cables. <i>IEEE Transactions on Applied Superconductivity</i> , 2001, 11, 1777-1780.	1.7	9

#	ARTICLE	IF	CITATIONS
55	Testing of a 1.5-m Single-Phase Short-Sample Cable Made With Copper Laminated HTS Tapes at ORNL. IEEE Transactions on Applied Superconductivity, 2005, 15, 1755-1758.	1.7	9
56	Optimal dispatch of combined heat and power plant in integrated energy system: A state of the art review and case study of Copenhagen. Energy Procedia, 2019, 158, 2794-2799.	1.8	9
57	Molecular beam epitaxy growth and microstructure of thin superconducting Bi2Sr2CaCu2Ox films. Physica C: Superconductivity and Its Applications, 1995, 253, 383-390.	1.2	8
58	Measuring AC-loss in high temperature superconducting cable-conductors using four probe methods. IEEE Transactions on Applied Superconductivity, 1999, 9, 1169-1172.	1.7	8
59	Concurrent provision of frequency regulation and overvoltage support by electric vehicles in a real Danish low voltage network. , 2014, , .		8
60	Cooperative Control of Wind-Hydrogen-SMES Hybrid Systems for Fault-Ride-Through Improvement and Power Smoothing. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-7.	1.7	8
61	Superconducting generators for wind turbines: Design considerations. Journal of Physics: Conference Series, 2010, 234, 032038.	0.4	7
62	Power quality issues into a Danish low-voltage grid with electric vehicles. , 2011, , .		7
63	Integration of Fuel Cell Micro-CHPS on Low Voltage Grid: A Danish Case Study. , 2012, , .		7
64	Low AC Loss in a 3 kA HTS Cable of the Dutch Project. Physics Procedia, 2012, 36, 1285-1289.	1.2	7
65	Solid state amorphization in the CoTi system. Thin Solid Films, 1999, 345, 319-329.	1.8	6
66	Using Service Oriented Architecture in a Generic Virtual Power Plant. , 2009, , .		6
67	Is micro-CHP price controllable under price signal controlled Virtual Power Plants?. , 2011, , .		6
68	Short-circuit experiments on a high-Tc superconducting cable conductor. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1585-1587.	1.2	5
69	Testing of a Liquid Nitrogen Cooled 5-meter, 3000 A Tri-Axial High Temperature Superconducting Cable System. AIP Conference Proceedings, 2006, , .	0.4	5
70	High temperature superconductor machine prototype. , 2011, , .		5
71	Coil Optimization for High Temperature Superconductor Machines. IEEE Transactions on Applied Superconductivity, 2011, 21, 1136-1140.	1.7	5
72	Low Friction Cryostat for HTS Power Cable of Dutch Project. Physics Procedia, 2012, 36, 1309-1312.	1.2	5

#	ARTICLE	IF	CITATIONS
73	A dynamic behaviour analysis on the frequency control capability of electric vehicles. , 2014, , .		5
74	Data-driven State of Health Modeling of Battery Energy Storage Systems Providing Grid Services. , 2021, , .		5
75	Site Selection Criteria for Battery Energy Storage in Power Systems. , 2020, , .		5
76	Facilitating Water electrolyzers for electricity-grid services in Europe through establishing standardized testing protocols. Clean Energy, 2020, 4, 379-388.	3.2	5
77	Transmission electron microscopy study of the interface of Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ thin films on (110) oriented SrTiO ₃ substrates. Journal of Crystal Growth, 1998, 191, 421-429.	1.5	4
78	Measurements of AC losses in different former materials. Physica C: Superconductivity and Its Applications, 1998, 310, 267-271.	1.2	4
79	Integrating intelligent electric devices into Distributed Energy Resources in a cloud-based environment. , 2013, , .		4
80	Economic Evaluation of Frequency Reserve Provision using Battery Energy Storage. , 2019, , .		4
81	High resolution electron microscopy on superconducting YBa ₂ Cu ₃ O ₇ thin films. Thin Solid Films, 1993, 228, 178-181.	1.8	3
82	Orientalional Changes in the ab plane of YBa ₂ Cu ₃ O ₇ + δ Films on Different Substrates. Journal of Applied Crystallography, 1996, 29, 125-133.	4.5	3
83	TEM analysis of planar defects induced by Ti doping in Bi-2212 single crystals. Physica C: Superconductivity and Its Applications, 1997, 290, 239-251.	1.2	3
84	A new concept for superconducting DC transmission from a wind farm. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1560-1563.	1.2	3
85	Electromagnetic losses in a three-phase high temperature superconducting cable determined by calorimetric measurements. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1564-1566.	1.2	3
86	AC loss in superconducting wires operating in a wind turbine like generator. Journal of Physics: Conference Series, 2010, 234, 032051.	0.4	3
87	Economic dispatch of electric energy storage with multi-service provision. , 2010, , .		3
88	Measurement of AC Losses in a Racetrack Superconducting Coil Made from YBCO Coated Conductor. Physics Procedia, 2012, 36, 980-984.	1.2	3
89	Applications of AI-Based Forecasts in Renewable Based Electricity Balancing Markets. , 2021, , .		3
90	Orientation of the charge-density-wave chains in thin films of Rb _{0.30} MoO ₃ . Synthetic Metals, 1997, 86, 2193-2194.	3.9	2

#	ARTICLE	IF	CITATIONS
91	Growth phenomena of Bi ₂ Sr ₂ CaCu ₂ O ₈ + $\hat{\Gamma}$ thin films deposited on (110) oriented SrTiO ₃ substrates. Thin Solid Films, 1997, 304, 212-221.	1.8	2
92	AC losses in circular arrangements of parallel superconducting tapes. Physica C: Superconductivity and Its Applications, 1998, 310, 192-196.	1.2	2
93	Contactless electrical measurements of transport ac losses in a 3 m long superconducting cable. Superconductor Science and Technology, 2002, 15, 898-901.	3.5	2
94	High T _c /bi-epitaxial junctions and dc SQUIDs structured by focused ion beam etching. IEEE Transactions on Applied Superconductivity, 1995, 5, 2513-2516.	1.7	1
95	Structural properties of Bi ₂ Sr ₂ CaCu ₂ O ₈ + $\hat{\Gamma}$ thin films on (110) oriented SrTiO ₃ substrates. Thin Solid Films, 1998, 319, 215-218.	1.8	1
96	Measuring ac losses in superconducting cables using a resonant circuit: resonant current experiment (RESCUE). Superconductor Science and Technology, 1998, 11, 1306-1310.	3.5	1
97	Test results of full-scale high temperature superconductors cable models destined for a 36 kV, 2 kA utility demonstration. Physica C: Superconductivity and Its Applications, 2001, 357-360, 1241-1244.	1.2	1
98	AC Losses in Bi ₂ Sr ₂ CaCu ₂ O ₈ +x Tapes and a 3.15-m-Long Single-Phase Cable. IEEE Transactions on Applied Superconductivity, 2011, 21, 3599-3603.	1.7	1
99	Guidelines for distribution system operators on reactive power provision by electric vehicles in low-voltage grids. CIREN - Open Access Proceedings Journal, 2017, 2017, 1787-1791.	0.1	1
100	TEM cross-section of high-T _c superconducting thin films. Micron and Microscopica Acta, 1992, 23, 225-226.	0.2	0
101	Large change of irreversible and reversible magnetic properties by Ti-doped in Bi-2212. European Physical Journal D, 1996, 46, 1677-1678.	0.4	0
102	The electrical aspects of the choice of former in a high T _c / superconducting power cable. IEEE Transactions on Applied Superconductivity, 1999, 9, 766-769.	1.7	0
103	Ranking Entities in Networks via Lefschetz Duality. , 2014, , .		0
104	Assessment of Energy Storage Systems for Multiple Grid Service Provision. , 2020, , .		0
105	Topological Rankings in Communication Networks. International Journal of Simulation: Systems, Science and Technology, 0, , .	0.0	0