Kentaro Yaji

List of Publications by Year
in descending order

44 papers	719 citations	623574 14 h-index	526166 27 g-index
44 all docs	44 docs citations	44 times ranked	395 citing authors

#	ARTICLE	IF	CITATIONS
1	Optimum design of micromixer for a non-Newtonian fluid by topology optimization. Chemical Engineering Journal, 2022, 428, 131367.	6.6	15
2	Data-driven multifidelity topology design using a deep generative model: Application to forced convection heat transfer problems. Computer Methods in Applied Mechanics and Engineering, 2022, 388, 114284.	3.4	17
3	Topology optimization for the elastic field using the lattice Boltzmann method. Computers and Mathematics With Applications, 2022, 110, 123-134.	1.4	4
4	Topology design of two-fluid heat exchange. Structural and Multidisciplinary Optimization, 2021, 63, 821-834.	1.7	18
5	Three-dimensional topology optimization model to simulate the external shapes of bone. PLoS Computational Biology, 2021, 17, e1009043.	1.5	4
6	Data-driven topology design using a deep generative model. Structural and Multidisciplinary Optimization, 2021, 64, 1401-1420.	1.7	15
7	Topology optimization for incompressible viscous fluid flow using the lattice kinetic scheme. Computers and Mathematics With Applications, 2021, 97, 251-266.	1.4	5
8	Level set-based topology optimization for two dimensional turbulent flow using an immersed boundary method. Journal of Computational Physics, 2021, 446, 110630.	1.9	10
9	Multifidelity design guided by topology optimization. Structural and Multidisciplinary Optimization, 2020, 61, 1071-1085.	1.7	13
10	Topology optimization incorporating external variables with metamodeling. Structural and Multidisciplinary Optimization, 2020, 62, 2455-2466.	1.7	3
11	Level-set based topology optimization of transient flow using lattice Boltzmann method considering an oscillating flow condition. Computers and Mathematics With Applications, 2020, 80, 82-108.	1.4	9
12	Topology Optimization for Porous Cooling Systems. Mathematics for Industry, 2020, , 147-156.	0.4	0
13	Application of Topology Optimization to Fluid Problems. Journal of the Japan Society for Precision Engineering, 2020, 86, 400-404.	0.0	0
14	Freeform winglet design of fin-and-tube heat exchangers guided by topology optimization. Applied Thermal Engineering, 2019, 161, 114020.	3.0	35
15	Topology-Optimization-Based EMC Design. , 2019, , .		2
16	Topology-Optimization-Based Conductor Pattern Design for Inductance Cancellation Structure to Reduce Common- and Differential-Mode Noise. , 2019, , .		1
17	Topology optimization method for unsteady state incompressible viscous flow based on a level set immersed boundary method. Transactions of the JSME (in Japanese), 2019, 85, 18-00423-18-00423.	0.1	0
18	Computational design of flow fields for vanadium redox flow batteries via topology optimization. Journal of Energy Storage, 2019, 26, 100990.	3.9	34

#	Article	IF	Citations
19	Knowledge discovery in databases for determining formulation in topology optimization. Structural and Multidisciplinary Optimization, 2019, 59, 595-611.	1.7	8
20	Topology optimization of conductors in electrical circuit. Structural and Multidisciplinary Optimization, 2019, 59, 2205-2225.	1.7	11
21	Production of the different shapes of the vertebral bodies among teleost fish species by the mathematical model using topology optimization. The Proceedings of Design & Systems Conference, 2019, 2019.29, 2108.	0.0	0
22	A Framework of Multi-Fidelity Topology Design and its Application to Optimum Design of Flow Fields in Battery Systems. , 2019, , .		1
23	Large-scale topology optimization incorporating local-in-time adjoint-based method for unsteady thermal-fluid problem. Structural and Multidisciplinary Optimization, 2018, 58, 817-822.	1.7	30
24	An Optimum Design Method for a Thermal-Fluid Device Incorporating Multiobjective Topology Optimization With an Adaptive Weighting Scheme. Journal of Mechanical Design, Transactions of the ASME, 2018, 140, .	1.7	39
25	Topology optimization for the design of flow fields in a redox flow battery. Structural and Multidisciplinary Optimization, 2018, 57, 535-546.	1.7	53
26	Doping Profile Optimization for Power Devices Using Topology Optimization. IEEE Transactions on Electron Devices, 2018, 65, 3869-3877.	1.6	0
27	Topology optimization method for incompressible viscous flow applying an immersed boundary method. Transactions of the JSME (in Japanese), 2018, 84, 17-00551-17-00551.	0.1	1
28	Topology Optimization of Power Semiconductor Devices. , 2018, , 1685-1692.		0
29	Knowledge Discovery in Dataset Generated by Topology Optimization. , 2018, , 1156-1167.		0
30	Topology optimization of a no-moving-part valve incorporating Pareto frontier exploration. Structural and Multidisciplinary Optimization, 2017, 56, 839-851.	1.7	14
31	Level set-based topology optimization for the design of a peltier effect thermoelectric actuator. Structural and Multidisciplinary Optimization, 2017, 55, 1671-1683.	1.7	6
32	A level set-based topology optimization method for optimal manifold designs with flow uniformity in plate-type microchannel reactors. Structural and Multidisciplinary Optimization, 2017, 55, 1311-1327.	1.7	25
33	Local-in-time adjoint-based topology optimization of unsteady fluid flows using the lattice Boltzmann method. Mechanical Engineering Journal, 2017, 4, 17-00120-17-00120.	0.2	14
34	A Semi-analytical Model for Wind-fed Black Hole High-mass X-Ray Binaries: State Transition Triggered by Magnetic Fields from the Companion Star. Astrophysical Journal, 2017, 847, 129.	1.6	0
35	Level set-based topology optimization targeting micropumps employing an induced-charge electro-osmosis flow. Transactions of the JSME (in Japanese), 2016, 82, 15-00406-15-00406.	0.1	1
36	Shape and topology optimization based on the convected level set method. Structural and Multidisciplinary Optimization, 2016, 54, 659-672.	1.7	19

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37	Topology optimization in thermal-fluid flow using the lattice Boltzmann method. Journal of Computational Physics, 2016, 307, 355-377.	1.9	82
38	Large-Scale Topology Optimization in Fluid Flow Problems. The Proceedings of Design & Systems Conference, 2016, 2016.26, 2310.	0.0	0
39	A topology optimization method for a coupled thermalâ€"fluid problem using level set boundary expressions. International Journal of Heat and Mass Transfer, 2015, 81, 878-888.	2.5	150
40	Structural Optimization of a Brake Disc. Journal of the Japan Society for Precision Engineering, 2014, 80, 763-770.	0.0	1
41	Topology optimization using the lattice Boltzmann method incorporating level set boundary expressions. Journal of Computational Physics, 2014, 274, 158-181.	1.9	75
42	Level set-based topology optimization of steady state incompressible viscous flows under outflow rate inequality constraint. Transactions of the JSME (in Japanese), 2014, 80, DSM0213-DSM0213.	0.1	1
43	A Level Set-Based Topology Optimization Using the Lattice-Boltzmann Method. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2013, 79, 2152-2163.	0.2	3
44	CO-JP-8 Level Set-Based Topology Optimization of an Internal Flow Problem in an Incompressible Viscous Fluid. The Proceedings of Mechanical Engineering Congress Japan, 2012, 2012, _CO-JP-8-1-_CO-JP-8-6.	0.0	0