Jens C Niemeyer

List of Publications by Year
in descending order

61	4,158	136950 32	168389 53
papers	citations	h-index	g-index

62	62	62	2710
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Type Ia Supernova Explosion Models. Annual Review of Astronomy and Astrophysics, 2000, 38, 191-230.	24.3	967
2	Simulations of solitonic core mergers in ultralight axion dark matter cosmologies. Physical Review D, 2016, 94, .	4.7	224
3	The Thermonuclear Explosion of Chandrasekhar Mass White Dwarfs. Astrophysical Journal, 1997, 475, 740-753.	4.5	194
4	Inflation with a Planck-scale frequency cutoff. Physical Review D, 2001, 63, .	4.7	193
5	Perturbation spectrum in inflation with a cutoff. Physical Review D, 2001, 64, .	4.7	192
6	Black hole formation in the early Universe. Monthly Notices of the Royal Astronomical Society, 2013, 433, 1607-1618.	4.4	176
7	A Threeâ€Dimensional Deflagration Model for Type Ia Supernovae Compared with Observations. Astrophysical Journal, 2007, 668, 1132-1139.	4.5	143
8	Formation and structure of ultralight bosonic dark matter halos. Physical Review D, 2018, 98, .	4.7	143
9	Trans-Planckian dispersion and scale invariance of inflationary perturbations. Physical Review D, 2001, 64, .	4.7	132
10	The characteristic black hole mass resulting from direct collapse in the early Universe. Monthly Notices of the Royal Astronomical Society, 2013, 436, 2989-2996.	4.4	129
11	Strong Constraints on Fuzzy Dark Matter from Ultrafaint Dwarf Galaxy Eridanus II. Physical Review Letters, 2019, 123, 051103.	7.8	116
12	Small-scale structure of fuzzy and axion-like dark matter. Progress in Particle and Nuclear Physics, 2020, 113, 103787.	14.4	101
13	Hydrodynamical adaptive mesh refinement simulations of turbulent flows - II. Cosmological simulations of galaxy clusters. Monthly Notices of the Royal Astronomical Society, 2008, 388, 1089-1100.	4.4	84
14	Cosmological particle-in-cell simulations with ultralight axion dark matter. Physical Review D, 2016, 94, .	4.7	77
15	Formation and mass growth of axion stars in axion miniclusters. Physical Review D, 2019, 100, .	4.7	71
16	Substructure of fuzzy dark matter haloes. Monthly Notices of the Royal Astronomical Society, 2017, 465, 941-951.	4.4	70
17	Numerical dissipation and the bottleneck effect in simulations of compressible isotropic turbulence. Computers and Fluids, 2006, 35, 353-371.	2.5	69
18	Minimal modifications of the primordial power spectrum from an adiabatic short distance cutoff. Physical Review D, 2002, 66, .	4.7	68

#	Article	IF	Citations
19	The small-scale dynamo and the amplification of magnetic fields in massive primordial haloes. Monthly Notices of the Royal Astronomical Society, 2013, 432, 668-678.	4.4	66
20	Offâ€Center Deflagrations in Chandrasekhar Mass Type Ia Supernova Models. Astrophysical Journal, 1996, 471, 903-914.	4.5	64
21	High-resolution studies of massive primordial haloes. Monthly Notices of the Royal Astronomical Society, 2013, 430, 588-598.	4.4	64
22	Turbulence production and turbulent pressure support in the intergalactic medium. Monthly Notices of the Royal Astronomical Society, 2011, 414, 2297-2308.	4.4	63
23	ADAPTIVELY REFINED LARGE EDDY SIMULATIONS OF A GALAXY CLUSTER: TURBULENCE MODELING AND THE PHYSICS OF THE INTRACLUSTER MEDIUM. Astrophysical Journal, 2009, 707, 40-54.	4.5	56
24	Tidal disruption of fuzzy dark matter subhalo cores. Physical Review D, 2018, 97, .	4.7	50
25	THE FORMATION OF MASSIVE POPULATION III STARS IN THE PRESENCE OF TURBULENCE. Astrophysical Journal Letters, 2013, 772, L3.	8.3	48
26	Simulating mixed fuzzy and cold dark matter. Physical Review D, 2020, 102, .	4.7	46
27	On the Smallâ€Scale Stability of Thermonuclear Flames in Type Ia Supernovae. Astrophysical Journal, 2003, 588, 952-961.	4.5	43
28	New insights into the formation and growth of boson stars in dark matter halos. Physical Review D, 2021, 104, .	4.7	43
29	TURBULENCE IN A THREE-DIMENSIONAL DEFLAGRATION MODEL FOR TYPE Ia SUPERNOVAE. I. SCALING PROPERTIES. Astrophysical Journal, 2009, 696, 1491-1497.	4.5	37
30	Impact of baryonic streaming velocities on the formation of supermassive black holes via direct collapse. Monthly Notices of the Royal Astronomical Society, 2014, 440, 2969-2975.	4.4	37
31	Hydrodynamical adaptive mesh refinement simulations of turbulent flows - I. Substructure in a wind. Monthly Notices of the Royal Astronomical Society, 2008, 388, 1079-1088.	4.4	36
32	Cosmological fluid mechanics with adaptively refined large eddy simulations. Monthly Notices of the Royal Astronomical Society, 2014, 440, 3051-3077.	4.4	34
33	Core-halo mass relation of ultralight axion dark matter from merger history. Physical Review D, 2017, 95, .	4.7	31
34	Probing two-field open inflation by resonant signals in correlation functions. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 006-006.	5.4	29
35	Neutron starâ€“axion star collisions in the light of multimessenger astronomy. Monthly Notices of the Royal Astronomical Society, 2019, 483, 908-914.	4.4	29
36	Anisotropic Kantowski-Sachs universe from gravitational tunneling and its observational signatures. Physical Review D, 2010, 82, .	4.7	27

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37	Gravitational collapse in the postinflationary Universe. Physical Review D, 2022, 105, .	4.7	22
38	Varying speed of light cosmology from a stringy short distance cutoff. Physical Review D, 2002, 65, .	4.7	20
39	TURBULENCE IN A THREE-DIMENSIONAL DEFLAGRATION MODEL FOR TYPE Ia SUPERNOVAE. II. INTERMITTENCY AND THE DEFLAGRATION-TO-DETONATION TRANSITION PROBABILITY. Astrophysical Journal, 2010, 710, 1683-1693.	4.5	19
40	Hot and turbulent gas in clusters. Monthly Notices of the Royal Astronomical Society, 2016, 459, 701-719.	4.4	17
41	Large-eddy simulations of isolated disc galaxies with thermal and turbulent feedback. Monthly Notices of the Royal Astronomical Society, 2014, 442, 3407-3426.	4.4	16
42	The anisotropic line correlation function as a probe of anisotropies in galaxy surveys. Monthly Notices of the Royal Astronomical Society, 2015, 453, 797-809.	4.4	16
43	Deep Zoom-In Simulation of a Fuzzy Dark Matter Galactic Halo. Physical Review Letters, 2022, 128, 181301.	7.8	16
44	Level set simulations of turbulent thermonuclear deflagration in degenerate carbon and oxygen. Combustion Theory and Modelling, 2005, 9, 693-720.	1.9	14
45	Nonlinear evolution of de Sitter space instabilities. Physical Review D, 2000, 62, .	4.7	13
46	Tunneling and propagation of vacuum bubbles on dynamical backgrounds. Journal of Cosmology and Astroparticle Physics, 2009, 2009, 008-008.	5.4	13
47	Magnetic fields during high redshift structure formation. Astronomische Nachrichten, 2013, 334, 531-536.	1.2	9
48	Numerical Investigation of Scaling Properties of Turbulent Premixed Flames. Combustion Science and Technology, 1997, 128, 343-358.	2.3	8
49	Damped corrections to inflationary spectra from a fluctuating cutoff. Physical Review D, 2007, 76, .	4.7	7
50	Inflationary spectra from Lorentz violating dissipative models. Physical Review D, 2008, 78, .	4.7	7
51	Thermonuclear supernovae. Computer Physics Communications, 2000, 127, 53-58.	7.5	4
52	Small Steps Toward Realistic Explosion Models of Type Ia Supernovae. , 0, , 151-157.		3
53	Multidimensional simulations of type Ia supernova explosions and nucleosynthesis. Nuclear Physics A, 2003, 718, 229-238.	1.5	1
54	Modelling Turbulent Deflagrations in Type Ia Supernovae. Nuclear Physics A, 2005, 758, 431-438.	1.5	1

#	Article	IF	Citations
55	Thermonuclear Supernovae. EAS Publications Series, 2004, 11, 141-162.	0.3	0
56	Star Formation in the Turbulent Interstellar Medium and Its Implications on Galaxy Evolution. , 2009, , 79-91.		0
57	Modelling turbulent effects of stellar feedback in cosmological simulations. Monthly Notices of the Royal Astronomical Society, 2019, 482, 4654-4672.	4.4	0
58	Numerical Models of Turbulence in Isothermal and Thermally Bistable Interstellar Gas. , 2010, , 371-382.		0
59	Turbulence Modeling and the Physics ofÂtheÂIntra-Cluster Medium. , 2010, , 383-394.		0
60	Modeling of Turbulent Flows Applied toÂNumerical Simulations of Galaxy Clusters. , 2009, , 45-56.		0
61	Nuclear Combustion. , 0, , .		0