

# Nickolay Y Gnedin

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/442881/publications.pdf>

Version: 2024-02-01

36  
papers

2,944  
citations

304743

22  
h-index

395702

33  
g-index

37  
all docs

37  
docs citations

37  
times ranked

2429  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Hydro-particle-mesh Code for Efficient and Rapid Simulations of the Intracluster Medium. <i>Astrophysical Journal</i> , 2022, 925, 134.	4.5	1
2	Cosmic Reionization on Computers: Evolution of the Flux Power Spectrum. <i>Astrophysical Journal</i> , 2022, 928, 174.	4.5	5
3	Approximating Density Probability Distribution Functions Across Cosmologies. <i>Astrophysical Journal</i> , 2022, 929, 135.	4.5	2
4	Measuring the Density Fields around Bright Quasars at $z \sim 6$ with XQR-30 Spectra. <i>Astrophysical Journal</i> , 2022, 931, 29.	4.5	12
5	The Distribution and Evolution of Quasar Proximity Zone Sizes. <i>Astrophysical Journal</i> , 2021, 911, 60.	4.5	19
6	Spatial Decorrelation of Young Stars and Dense Gas as a Probe of the Star Formationâ€œFeedback Cycle in Galaxies. <i>Astrophysical Journal</i> , 2021, 918, 13.	4.5	18
7	Recovering Density Fields inside Quasar Proximity Zones at $z \sim 6$ . <i>Astrophysical Journal</i> , 2021, 916, 118.	4.5	4
8	Constraining the Tail End of Reionization Using Ly $\alpha$ Transmission Spikes. <i>Astrophysical Journal</i> , 2019, 876, 31.	4.5	19
9	What Sets the Slope of the Molecular Kennicuttâ€œSchmidt Relation?. <i>Astrophysical Journal</i> , 2019, 870, 79.	4.5	18
10	How Galaxies Form Stars: The Connection between Local and Global Star Formation in Galaxy Simulations. <i>Astrophysical Journal</i> , 2018, 861, 4.	4.5	66
11	Cosmic Reionization on Computers: Properties of the Post-reionization IGM. <i>Astrophysical Journal</i> , 2017, 841, 26.	4.5	32
12	The Physical Origin of Long Gas Depletion Times in Galaxies. <i>Astrophysical Journal</i> , 2017, 845, 133.	4.5	88
13	NONUNIVERSAL STAR FORMATION EFFICIENCY IN TURBULENT ISM. <i>Astrophysical Journal</i> , 2016, 826, 200.	4.5	92
14	THE EFFECTS OF DARK MATTER ANNIHILATION ON COSMIC REIONIZATION. <i>Astrophysical Journal</i> , 2016, 833, 162.	4.5	2
15	COSMIC REIONIZATION ON COMPUTERS: NUMERICAL AND PHYSICAL CONVERGENCE. <i>Astrophysical Journal</i> , 2016, 821, 50.	4.5	17
16	Accounting for baryonic effects in cosmic shear tomography: determining a minimal set of nuisance parameters using PCA. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 454, 2451-2471.	4.4	77
17	LINE OVERLAP AND SELF-SHIELDING OF MOLECULAR HYDROGEN IN GALAXIES. <i>Astrophysical Journal</i> , 2014, 795, 37.	4.5	65
18	COSMIC REIONIZATION ON COMPUTERS. I. DESIGN AND CALIBRATION OF SIMULATIONS. <i>Astrophysical Journal</i> , 2014, 793, 29.	4.5	139

#	ARTICLE	IF	CITATIONS
19	COSMIC REIONIZATION ON COMPUTERS. II. REIONIZATION HISTORY AND ITS BACK-REACTION ON EARLY GALAXIES. <i>Astrophysical Journal</i> , 2014, 793, 30.	4.5	91
20	TOWARD A COMPLETE ACCOUNTING OF ENERGY AND MOMENTUM FROM STELLAR FEEDBACK IN GALAXY FORMATION SIMULATIONS. <i>Astrophysical Journal</i> , 2013, 770, 25.	4.5	371
21	Nonthermal dark matter mimicking an additional neutrino species in the early universe. <i>Physical Review D</i> , 2012, 85, .	4.7	69
22	COOLING AND HEATING FUNCTIONS OF PHOTOIONIZED GAS. <i>Astrophysical Journal, Supplement Series</i> , 2012, 202, 13.	7.7	75
23	Hierarchical task mapping of cell-based AMR cosmology simulations. , 2012, , .		7
24	THE X-FACTOR IN GALAXIES. II. THE MOLECULAR-HYDROGEN-STAR-FORMATION RELATION. <i>Astrophysical Journal</i> , 2012, 758, 127.	4.5	45
25	THE X-FACTOR IN GALAXIES. I. DEPENDENCE ON ENVIRONMENT AND SCALE. <i>Astrophysical Journal</i> , 2012, 747, 124.	4.5	104
26	ENVIRONMENTAL DEPENDENCE OF THE KENNICUTT-SCHMIDT RELATION IN GALAXIES. <i>Astrophysical Journal</i> , 2011, 728, 88.	4.5	198
27	Performance Emulation of Cell-Based AMR Cosmology Simulations. , 2011, , .		7
28	IMPLEMENTING THE DC MODE IN COSMOLOGICAL SIMULATIONS WITH SUPERCOMOVING VARIABLES. <i>Astrophysical Journal, Supplement Series</i> , 2011, 194, 46.	7.7	65
29	ON THE KENNICUTT-SCHMIDT RELATION OF LOW-METALLICITY HIGH-REDSHIFT GALAXIES. <i>Astrophysical Journal</i> , 2010, 714, 287-295.	4.5	103
30	On the Kennicutt-Schmidt Relation of Low-Metallicity High-Redshift Galaxies. , 2010, , .		0
31	Inelastic dark matter as an efficient fuel for compact stars. <i>Physical Review D</i> , 2010, 81, .	4.7	39
32	The Fate of the First Galaxies. I. Self-consistent Cosmological Simulations with Radiative Transfer. <i>Astrophysical Journal</i> , 2002, 575, 33-48.	4.5	148
33	Multi-dimensional cosmological radiative transfer with a Variable Eddington Tensor formalism. <i>New Astronomy</i> , 2001, 6, 437-455.	1.8	216
34	Cosmological Reionization by Stellar Sources. <i>Astrophysical Journal</i> , 2000, 535, 530-554.	4.5	315
35	Probing the Universe with the Ly $\alpha$ forest -- I. Hydrodynamics of the low-density intergalactic medium. <i>Monthly Notices of the Royal Astronomical Society</i> , 1998, 296, 44-55.	4.4	344
36	Softened Lagrangian hydrodynamics for cosmology. <i>Astrophysical Journal, Supplement Series</i> , 1995, 97, 231.	7.7	71