Eric R Coughlin

List of Publications by Year
in descending order

50 papers	1,442 citations	331670 21 h-index	315739 38 g-index
50 all docs	50 docs citations	50 times ranked	1254 citing authors

#	Article	IF	Citations
1	An Embedded X-Ray Source Shines through the Aspherical ATÂ2018cow: Revealing the Inner Workings of the Most Luminous Fast-evolving Optical Transients. Astrophysical Journal, 2019, 872, 18.	4.5	160
2	HYPERACCRETION DURING TIDAL DISRUPTION EVENTS: WEAKLY BOUND DEBRIS ENVELOPES AND JETS. Astrophysical Journal, 2014, 781, 82.	4.5	115
3	Mass ejection in failed supernovae: variation with stellar progenitor. Monthly Notices of the Royal Astronomical Society, 2018, 476, 2366-2383.	4.4	76
4	A Mildly Relativistic Outflow from the Energetic, Fast-rising Blue Optical Transient CSS161010 in a Dwarf Galaxy. Astrophysical Journal Letters, 2020, 895, L23.	8.3	70
5	VARIABILITY IN TIDAL DISRUPTION EVENTS: GRAVITATIONALLY UNSTABLE STREAMS. Astrophysical Journal Letters, 2015, 808, L11.	8.3	66
6	Black hole accretion discs and luminous transients in failed supernovae from non-rotating supergiants. Monthly Notices of the Royal Astronomical Society: Letters, 2019, 485, L83-L88.	3.3	66
7	Tidal disruption events from supermassive black hole binaries. Monthly Notices of the Royal Astronomical Society, 2017, 465, 3840-3864.	4.4	62
8	Partial Stellar Disruption by a Supermassive Black Hole: Is the Light Curve Really Proportional to t^{âˆ’9/4}?. Astrophysical Journal Letters, 2019, 883, L17.	8.3	58
9	The fine line between total and partial tidal disruption events. Astronomy and Astrophysics, 2017, 600, A124.	5.1	55
10	A loud quasi-periodic oscillation after a star is disrupted by a massive black hole. Science, 2019, 363, 531-534.	12.6	51
11	Post-periapsis pancakes: sustenance for self-gravity in tidal disruption events. Monthly Notices of the Royal Astronomical Society, 2016, 455, 3612-3627.	4.4	49
12	On the structure of tidally disrupted stellar debris streams. Monthly Notices of the Royal Astronomical Society, 2016, 459, 3089-3103.	4.4	46
13	Tidal Disruption Events: The Role of Stellar Spin. Astrophysical Journal, 2019, 872, 163.	4.5	45
14	On the Diversity of Fallback Rates from Tidal Disruption Events with Accurate Stellar Structure. Astrophysical Journal Letters, 2019, 882, L26.	8.3	43
15	Thawing the frozen-in approximation: implications for self-gravity in deeply plunging tidal disruption events. Monthly Notices of the Royal Astronomical Society: Letters, 2019, 485, L146-L150.	3.3	42
16	Super-Eddington accretion in tidal disruption events: the impactof realistic fallback rates on accretion rates. Monthly Notices of the Royal Astronomical Society, 2018, 478, 3016-3024.	4.4	34
17	Fallback Rates from Partial Tidal Disruption Events. Astrophysical Journal, 2020, 899, 36.	4.5	32
18	Tidal disruption discs formed and fed by streamâ€“stream and streamâ€“disc interactions in global GRHD simulations. Monthly Notices of the Royal Astronomical Society, 2021, 510, 1627-1648.	4.4	28

#	ARTICLE	IF	CITATIONS
19	A physical model of mass ejection in failed supernovae. Monthly Notices of the Royal Astronomical Society, 2018, 477, 1225-1238.	4.4	27
20	Weak Shock Propagation with Accretion. I. Self-similar Solutions and Application to Failed Supernovae. Astrophysical Journal, 2018, 863, 158.	4.5	23
21	VISCOUS BOUNDARY LAYERS OF RADIATION-DOMINATED, RELATIVISTIC JETS. I. THE TWO-STREAM MODEL. Astrophysical Journal, 2015, 809, 1.	4.5	22
22	Tidal disruption by extreme mass ratio binaries and application to ASASSN-15lh. Monthly Notices of the Royal Astronomical Society, 2018, 474, 3857-3865.	4.4	22
23	Partial, Zombie, and Full Tidal Disruption of Stars by Supermassive Black Holes. Astrophysical Journal, 2021, 922, 168.	4.5	22
24	Using the Hills Mechanism to Generate Repeating Partial Tidal Disruption Events and ASASSN-14ko. Astrophysical Journal Letters, 2022, 929, L20.	8.3	20
25	The Gravitational Instability of Adiabatic Filaments. Astrophysical Journal, Supplement Series, 2020, 247, 51.	7.7	17
26	Gravitational interactions of stars with supermassive black hole binaries â€“ I. Tidal disruption events. Monthly Notices of the Royal Astronomical Society, 2018, 477, 4009-4034.	4.4	15
27	Structured, relativistic jets driven by radiation. Monthly Notices of the Royal Astronomical Society, 2020, 499, 3158-3177.	4.4	13
28	THE GENERAL RELATIVISTIC EQUATIONS OF RADIATION HYDRODYNAMICS IN THE VISCOUS LIMIT. Astrophysical Journal, 2014, 797, 103.	4.5	12
29	Stellar Binaries Incident on Supermassive Black Hole Binaries: Implications for Double Tidal Disruption Events, Calcium-rich Transients, and Hypervelocity Stars. Astrophysical Journal Letters, 2018, 863, L24.	8.3	12
30	Weak Shock Propagation with Accretion. II. Stability of Self-similar Solutions to Radial Perturbations. Astrophysical Journal, 2019, 874, 58.	4.5	12
31	Gravitational interactions of stars with supermassive black hole binaries â€“ II. Hypervelocity stars. Monthly Notices of the Royal Astronomical Society, 2019, 482, 2132-2148.	4.4	12
32	Stars Crushed by Black Holes. I. On the Energy Distribution of Stellar Debris in Tidal Disruption Events. Astrophysical Journal, 2021, 923, 184.	4.5	12
33	Ultra-deep tidal disruption events: prompt self-intersections and observables. Monthly Notices of the Royal Astronomical Society, 2019, 488, 5267-5278.	4.4	11
34	Variability in Short Gamma-Ray Bursts: Gravitationally Unstable Tidal Tails. Astrophysical Journal Letters, 2020, 896, L38.	8.3	10
35	The Eccentric Nature of Eccentric Tidal Disruption Events. Astrophysical Journal, 2022, 924, 34.	4.5	10
36	Stellar Revival and Repeated Flares in Deeply Plunging Tidal Disruption Events. Astrophysical Journal Letters, 2022, 927, L25.	8.3	10

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37	Energy-conserving Relativistic Corrections to Strong-shock Propagation. Astrophysical Journal, 2019, 880, 108.	4.5	9
38	Stars Crushed by Black Holes. II. A Physical Model of Adiabatic Compression and Shock Formation in Tidal Disruption Events. Astrophysical Journal, 2022, 926, 47.	4.5	8
39	VISCOUS BOUNDARY LAYERS OF RADIATION-DOMINATED, RELATIVISTIC JETS. II. THE FREE-STREAMING JET MODEL. Astrophysical Journal, 2015, 809, 2.	4.5	7
40	Weak Shock Propagation with Accretion. III. A Numerical Study on Shock Propagation and Stability. Astrophysical Journal, 2019, 878, 150.	4.5	7
41	The Influence of Black Hole Binarity on Tidal Disruption Events. Space Science Reviews, 2019, 215, 1.	8.1	6
42	SPHERICALLY SYMMETRIC, COLD COLLAPSE: THE EXACT SOLUTIONS AND A COMPARISON WITH SELF-SIMILAR SOLUTIONS. Astrophysical Journal, 2017, 835, 40.	4.5	5
43	Circumbinary discs from tidal disruption events. Monthly Notices of the Royal Astronomical Society: Letters, 2017, 471, L115-L119.	3.3	5
44	The Persistence of Pancakes and the Revival of Self-gravity in Tidal Disruption Events. Astrophysical Journal Letters, 2020, 900, L39.	8.3	5
45	Non-thermal filaments from the tidal destruction of clouds in the Galactic centre. Monthly Notices of the Royal Astronomical Society, 2020, 501, 1868-1877.	4.4	4
46	A Physical Model of Delayed Rebrightenings in Shock-interacting Supernovae without Narrow-line Emission. Astrophysical Journal, 2022, 927, 148.	4.5	2
47	THE RADIATION HYDRODYNAMICS OF RELATIVISTIC SHEAR FLOWS. Astrophysical Journal, 2016, 825, 21.	4.5	1
48	The structure of nearly isothermal, adiabatic shock waves. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 496, L43-L47.	3.3	1
49	Dynamical stability of giant planets: the critical adiabatic index in the presence of a solid core. Monthly Notices of the Royal Astronomical Society, 2021, 507, 6215-6224.	4.4	1
50	Short Gamma-Ray Bursts and the Decompression of Neutron Star Matter in Tidal Streams. Astrophysical Journal Letters, 2020, 900, L12.	8.3	1