

# Edward F Crawley

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

1,086  
citations

759233

12  
h-index

454955

30  
g-index

40  
all docs

40  
docs citations

40  
times ranked

766  
citing authors

#	ARTICLE	IF	CITATIONS
1	So many beams, so little time: Revenue Management in the next generation of flexible communication satellites. <i>Acta Astronautica</i> , 2022, 191, 479-490.	3.2	3
2	Model-Based System Architecting and Decision-Making. , 2022, , 1-42.		2
3	Static beam placement and frequency plan algorithms for LEO constellations. <i>International Journal of Satellite Communications and Networking</i> , 2021, 39, 65-77.	1.8	8
4	Category-Theoretic Formulation of the Model-Based Systems Architecting Cognitive-Computational Cycle. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 1945.	2.5	12
5	Connecting the other half: Exploring options for the 50% of the population unconnected to the internet. <i>Telecommunications Policy</i> , 2021, 45, 102092.	5.3	21
6	Lunar human landing system architecture tradespace modeling. <i>Acta Astronautica</i> , 2021, 181, 352-361.	3.2	2
7	An Updated Comparison of Four Low Earth Orbit Satellite Constellation Systems to Provide Global Broadband. , 2021, , .		89
8	Towards Context-Awareness in Model-Based Requirements Engineering. , 2021, , .		1
9	Object-Process Model-Based Operational Viewpoint Specification for Aerospace Architectures. , 2020, , .		8
10	A system concept representation framework and its testing on patents, urban architectural patterns, and software patterns. <i>Systems Engineering</i> , 2020, 23, 492-515.	2.7	5
11	Problem representation of dynamic resource allocation for flexible high throughput satellites. , 2019, , .		9
12	A technical comparison of three low earth orbit satellite constellation systems to provide global broadband. <i>Acta Astronautica</i> , 2019, 159, 123-135.	3.2	468
13	A Framework for Concept and its Testing on Patents. <i>IncoSE International Symposium</i> , 2018, 28, 1564-1577.	0.6	2
14	A model for understanding and managing cost growth on joint programs. <i>Acta Astronautica</i> , 2018, 152, 59-70.	3.2	5
15	Management Levers for Product Platforms. <i>EMJ - Engineering Management Journal</i> , 2017, 29, 128-139.	2.3	2
16	Integrated Tradespace Analysis of Space Network Architectures. <i>Journal of Aerospace Information Systems</i> , 2015, 12, 564-578.	1.4	9
17	Parametric Analysis of Single-Stage Earth-Departure-Stage In-Orbit Refueling. <i>Journal of Spacecraft and Rockets</i> , 2014, 51, 631-635.	1.9	1
18	A rule-based method for scalable and traceable evaluation of system architectures. <i>Research in Engineering Design - Theory, Applications, and Concurrent Engineering</i> , 2014, 25, 325-349.	2.1	8

#	ARTICLE	IF	CITATIONS
19	Exploring the Trade-offs of Aggregated versus Disaggregated Architectures for Environmental Monitoring in Low-Earth Orbit. , 2014, , .		4
20	Crafting Platform Strategy Based on Anticipated Benefits and Costs. , 2014, , 49-70.		9
21	A methodology for portfolio-level analysis of system commonality. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2013, 24, 349-373.	2.1	5
22	Divergence and lifecycle offsets in product families with commonality. Systems Engineering, 2013, 16, 175-192.	2.7	16
23	Architecting methodology for spatially and temporally distributed resource extraction systems. Systems Engineering, 2013, 16, 277-286.	2.7	2
24	Systems Architecting Methodology for Space Transportation Infrastructure. Journal of Spacecraft and Rockets, 2013, 50, 579-590.	1.9	10
25	Program goals for the NASA/NOAA Earth Observation Program derived from a stakeholder value network analysis. Space Policy, 2012, 28, 259-269.	1.5	13
26	A network-based modeling framework for stakeholder analysis of China's energy conservation campaign. Energy, 2011, 36, 4996-5003.	8.8	11
27	Strategic Decisions in Complex Stakeholder Environments: A Theory of Generalized Exchange. EMJ - Engineering Management Journal, 2011, 23, 37-45.	2.3	16
28	Assessment of architectural options for surface power generation and energy storage on human Mars missions. Acta Astronautica, 2010, 66, 1106-1112.	3.2	7
29	Making projects work: a review of transferable best practice approaches to engineering project-based learning in the UK. Engineering Education, 2010, 5, 41-49.	0.3	28
30	Algebra of Systems: A Metalanguage for Model Synthesis and Evaluation. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2009, 39, 501-513.	2.9	19
31	The Education of Future Aeronautical Engineers: Conceiving, Designing, Implementing and Operating. Journal of Science Education and Technology, 2008, 17, 138-151.	3.9	28
32	Value flow mapping: Using networks to inform stakeholder analysis. Acta Astronautica, 2008, 62, 324-333.	3.2	51
33	3.2.3 Divergence: The Impact of Lifecycle Changes on Commonality. Incose International Symposium, 2007, 17, 475-490.	0.6	3
34	Parallel and sequential development of complex platform-based product families. , 2007, , .		1
35	4.4.3 Extending Platforming to the Sequential Development of System Families. Incose International Symposium, 2006, 16, 636-651.	0.6	5
36	9.1.3 Modular Building Blocks for Manned Spacecraft: A Case Study for Moon and Mars Landing Systems. Incose International Symposium, 2005, 15, 1296-1312.	0.6	3

#	ARTICLE	IF	CITATIONS
37	The CDIO syllabus: a comparative study of expected student proficiency. European Journal of Engineering Education, 2003, 28, 297-315.	2.3	52
38	System function and architecture. Communications of the ACM, 2003, 46, 67-72.	4.5	141
39	Gravity and Suspension Effects on the Dynamics of Controlled Structures. , 1993, , .		3
40	Multiple Degree of Freedom Force-State Component Identification. , 1993, , .		4