Barbara K. Reck

List of Publications by Year
in descending order

44	4,356	25	41
papers	citations	h-index	g-index
		236925	276875

44	44	44	3486
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Challenges in Metal Recycling. Science, 2012, 337, 690-695.	12.6	569
2	Criticality of metals and metalloids. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4257-4262.	7.1	505
3	What Do We Know About Metal Recycling Rates?. Journal of Industrial Ecology, 2011, 15, 355-366.	5.5	476
4	Buildings as a global carbon sink. Nature Sustainability, 2020, 3, 269-276.	23.7	419
5	On the materials basis of modern society. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6295-6300.	7.1	346
6	Copper demand, supply, and associated energy use to 2050. Global Environmental Change, 2016, 39, 305-315.	7.8	272
7	Anthropogenic Nickel Cycle: Insights into Use, Trade, and Recycling. Environmental Science & Technology, 2008, 42, 3394-3400.	10.0	199
8	Resource Demand Scenarios for the Major Metals. Environmental Science & Technology, 2018, 52, 2491-2497.	10.0	169
9	Lost by Design. Environmental Science & Technology, 2015, 49, 9443-9451.	10.0	159
10	The energy benefit of stainless steel recycling. Energy Policy, 2008, 36, 181-192.	8.8	143
11	Six Years of Criticality Assessments: What Have We Learned So Far?. Journal of Industrial Ecology, 2016, 20, 692-699.	5.5	103
12	Criticality of Iron and Its Principal Alloying Elements. Environmental Science & Technology, 2014, 48, 4171-4177.	10.0	87
13	United States plastics: Large flows, short lifetimes, and negligible recycling. Resources, Conservation and Recycling, 2021, 167, 105440.	10.8	84
14	Anthropogenic nickel supply, demand, and associated energy and water use. Resources, Conservation and Recycling, 2017, 125, 300-307.	10.8	76
15	Global Stainless Steel Cycle Exemplifies Chinaâ€™s Rise to Metal Dominance. Environmental Science & Technology, 2010, 44, 3940-3946.	10.0	66
16	Metal Dissipation and Inefficient Recycling Intensify Climate Forcing. Environmental Science & Technology, 2016, 50, 11394-11402.	10.0	51
17	Life cycle carbon benefits of aerospace alloy recycling. Journal of Cleaner Production, 2014, 80, 38-45.	9.3	46
18	Exploratory Data Analysis of the Multilevel Anthropogenic Copper Cycle. Environmental Science & Technology, 2004, 38, 1253-1261.	10.0	44

#	Article	IF	Citations
19	Exploring the Global Journey of Nickel with Markov Chain Models. Journal of Industrial Ecology, 2012, 16, 334-342.	5.5	42
20	Comparing Growth Rates of Nickel and Stainless Steel Use in the Early 2000s. Journal of Industrial Ecology, 2012, 16, 518-528.	5.5	39
21	Looking Down Under for a Circular Economy of Indium. Environmental Science & Technology, 2018, 52, 2055-2062.	10.0	39
22	The anthropogenic cycle of zinc: Status quo and perspectives. Resources, Conservation and Recycling, 2017, 123, 1-10.	10.8	38
23	Anthropogenic metal cycles in China. Journal of Material Cycles and Waste Management, 2008, 10, 188-197.	3.0	33
24	â€œBottomâ€"upâ€•study of in-use nickel stocks in New Haven, CT. Resources, Conservation and Recycling, 2007, 50, 58-70.	10.8	31
25	Alloy information helps prioritize material criticality lists. Nature Communications, 2022, 13, 150.	12.8	30
26	Title is missing!. Agroforestry Systems, 1997, 39, 1-12.	2.0	28
27	Explanatory Variables for per Capita Stocks and Flows of Copper and Zinc. Journal of Industrial Ecology, 2008, 10, 111-132.	5.5	26
28	The rise and fall of American lithium. Resources, Conservation and Recycling, 2020, 162, 105034.	10.8	26
29	On the Spatial Dimension of the Circular Economy. Resources, 2019, 8, 32.	3.5	25
30	Regional development or resource preservation? A perspective from Japanese appliance exports. Ecological Economics, 2011, 70, 788-797.	5.7	23
31	Metal Criticality Determination for Australia, the US, and the Planetâ€"Comparing 2008 and 2012 Results. Resources, 2016, 5, 29.	3.5	21
32	Quantifying the potential for recoverable resources of gallium, germanium and antimony as companion metals in Australia. Ore Geology Reviews, 2017, 82, 148-159.	2.7	19
33	Uncertain Future of American Lithium: A Perspective until 2050. Environmental Science & Technology, 2021, 55, 16184-16194.	10.0	19
34	YSTAFDB, a unified database of material stocks and flows for sustainability science. Scientific Data, 2019, 6, 84.	5.3	17
35	Assessing the Reliability of Material Flow Analysis Results: The Cases of Rhenium, Gallium, and Germanium in the United States Economy. Environmental Science & Technology, 2017, 51, 11839-11847.	10.0	15
36	Unified Materials Information System (UMIS): An Integrated Material Stocks and Flows Data Structure. Journal of Industrial Ecology, 2019, 23, 222-240.	5.5	15

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37	Quantifying the Recoverable Resources of Companion Metals: A Preliminary Study of Australian Mineral Resources. Resources, 2014, 3, 657-671.	3.5	13
38	Nickel and chromium cycles: Stocks and flows project part IV. Jom, 2008, 60, 55-59.	1.9	11
39	Multilevel Anthropogenic Cycles of Copper and Zinc: A Comparative Statistical Analysis. Journal of Industrial Ecology, 2008, 10, 89-110.	5.5	9
40	Exploratory Data Analysis of the Multilevel Anthropogenic Zinc Cycle. Journal of Industrial Ecology, 2005, 9, 91-108.	5.5	8
41	Measuring the status of stainless steel use in the Japanese socio-economic system. Resources, Conservation and Recycling, 2010, 54, 737-743.	10.8	8
42	Recycling in Context. , 2014, , 17-26.		4
43	Material system analysis: Characterization of flows, stocks, and performance indicators of manganese, nickel, and natural graphite in the EU, 2012â€“2016. Journal of Industrial Ecology, 0, , .	5.5	3
44	Defining the Criticality of Materials. World Scientific Series in Current Energy Issues, 2019, , 103-115.	0.1	0