Barbara K. Reck

List of Publications by Year
in descending order

44 papers	4,356 citations	236925 25 h-index	276875 41 g-index
44 all docs	44 docs citations	44 times ranked	3486 citing authors

#	Article	IF	Citations
1	Alloy information helps prioritize material criticality lists. Nature Communications, 2022, 13, 150.	12.8	30
2	United States plastics: Large flows, short lifetimes, and negligible recycling. Resources, Conservation and Recycling, 2021, 167, 105440.	10.8	84
3	Uncertain Future of American Lithium: A Perspective until 2050. Environmental Science & Technology, 2021, 55, 16184-16194.	10.0	19
4	The rise and fall of American lithium. Resources, Conservation and Recycling, 2020, 162, 105034.	10.8	26
5	Buildings as a global carbon sink. Nature Sustainability, 2020, 3, 269-276.	23.7	419
6	YSTAFDB, a unified database of material stocks and flows for sustainability science. Scientific Data, 2019, 6, 84.	5.3	17
7	On the Spatial Dimension of the Circular Economy. Resources, 2019, 8, 32.	3.5	25
8	Unified Materials Information System (UMIS): An Integrated Material Stocks and Flows Data Structure. Journal of Industrial Ecology, 2019, 23, 222-240.	5.5	15
9	Defining the Criticality of Materials. World Scientific Series in Current Energy Issues, 2019, , 103-115.	0.1	0
10	Resource Demand Scenarios for the Major Metals. Environmental Science & Technology, 2018, 52, 2491-2497.	10.0	169
11	Looking Down Under for a Circular Economy of Indium. Environmental Science & Technology, 2018, 52, 2055-2062.	10.0	39
12	The anthropogenic cycle of zinc: Status quo and perspectives. Resources, Conservation and Recycling, 2017, 123, 1-10.	10.8	38
13	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
14	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
15	Anthropogenic nickel supply, demand, and associated energy and water use. Resources, Conservation and Recycling, 2017, 125, 300-307.	10.8	76
16	Metal Criticality Determination for Australia, the US, and the Planetâ€"Comparing 2008 and 2012 Results. Resources, 2016, 5, 29.	3.5	21
17	Six Years of Criticality Assessments: What Have We Learned So Far?. Journal of Industrial Ecology, 2016, 20, 692-699.	5.5	103
18	Metal Dissipation and Inefficient Recycling Intensify Climate Forcing. Environmental Science & Technology, 2016, 50, 11394-11402.	10.0	51

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19	Copper demand, supply, and associated energy use to 2050. Global Environmental Change, 2016, 39, 305-315.	7.8	272
20	Lost by Design. Environmental Science & Technology, 2015, 49, 9443-9451.	10.0	159
21	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
22	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
23	Quantifying the Recoverable Resources of Companion Metals: A Preliminary Study of Australian Mineral Resources. Resources, 2014, 3, 657-671.	3.5	13
24	Recycling in Context. , 2014, , 17-26.		4
25	Criticality of Iron and Its Principal Alloying Elements. Environmental Science & Technology, 2014, 48, 4171-4177.	10.0	87
26	Life cycle carbon benefits of aerospace alloy recycling. Journal of Cleaner Production, 2014, 80, 38-45.	9.3	46
27	Challenges in Metal Recycling. Science, 2012, 337, 690-695.	12.6	569
28	Exploring the Global Journey of Nickel with Markov Chain Models. Journal of Industrial Ecology, 2012, 16, 334-342.	5.5	42
29	Comparing Growth Rates of Nickel and Stainless Steel Use in the Early 2000s. Journal of Industrial Ecology, 2012, 16, 518-528.	5.5	39
30	What Do We Know About Metal Recycling Rates?. Journal of Industrial Ecology, 2011, 15, 355-366.	5.5	476
31	Regional development or resource preservation? A perspective from Japanese appliance exports. Ecological Economics, 2011, 70, 788-797.	5.7	23
32	Measuring the status of stainless steel use in the Japanese socio-economic system. Resources, Conservation and Recycling, 2010, 54, 737-743.	10.8	8
33	Global Stainless Steel Cycle Exemplifies Chinaâ€™s Rise to Metal Dominance. Environmental Science & Technology, 2010, 44, 3940-3946.	10.0	66
34	Nickel and chromium cycles: Stocks and flows project part IV. Jom, 2008, 60, 55-59.	1.9	11
35	Anthropogenic metal cycles in China. Journal of Material Cycles and Waste Management, 2008, 10, 188-197.	3.0	33
36	The energy benefit of stainless steel recycling. Energy Policy, 2008, 36, 181-192.	8.8	143

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37	Multilevel Anthropogenic Cycles of Copper and Zinc: A Comparative Statistical Analysis. Journal of Industrial Ecology, 2008, 10, 89-110.	5.5	9
38	Explanatory Variables for per Capita Stocks and Flows of Copper and Zinc. Journal of Industrial Ecology, 2008, 10, 111-132.	5.5	26
39	Anthropogenic Nickel Cycle: Insights into Use, Trade, and Recycling. Environmental Science & Technology, 2008, 42, 3394-3400.	10.0	199
40	â€œBottomâ€“upâ€•study of in-use nickel stocks in New Haven, CT. Resources, Conservation and Recycling, 2007, 50, 58-70.	10.8	31
41	Exploratory Data Analysis of the Multilevel Anthropogenic Zinc Cycle. Journal of Industrial Ecology, 2005, 9, 91-108.	5.5	8
42	Exploratory Data Analysis of the Multilevel Anthropogenic Copper Cycle. Environmental Science & Technology, 2004, 38, 1253-1261.	10.0	44
43	Title is missing!. Agroforestry Systems, 1997, 39, 1-12.	2.0	28
44	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