Mathieu Rouget

List of Publications by Year
in descending order

106 papers	11,296 citations	47006 47 h-index	36028 97 g-index
107 all docs	107 docs citations	107 times ranked	11925 citing authors

#	Article	IF	Citations
1	Integrating economic costs into conservation planning. Trends in Ecology and Evolution, 2006, 21, 681-687.	8.7	868
2	Preserving the evolutionary potential of floras in biodiversity hotspots. Nature, 2007, 445, 757-760.	27.8	787
3	Niche-based modelling as a tool for predicting the risk of alien plant invasions at a global scale. Global Change Biology, 2005, 11, 2234-2250.	9.5	742
4	Knowing But Not Doing: Selecting Priority Conservation Areas and the Researchâ€“Implementation Gap. Conservation Biology, 2008, 22, 610-617.	4.7	664
5	An operational model for mainstreaming ecosystem services for implementation. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9483-9488.	7.1	518
6	Mapping ecosystem services for planning and management. Agriculture, Ecosystems and Environment, 2008, 127, 135-140.	5.3	461
7	A conservation plan for a global biodiversity hotspotâ€”the Cape Floristic Region, South Africa. Biological Conservation, 2003, 112, 191-216.	4.1	319
8	Formulating conservation targets for biodiversity pattern and process in the Cape Floristic Region, South Africa. Biological Conservation, 2003, 112, 99-127.	4.1	297
9	Residence time and potential range: crucial considerations in modelling plant invasions. Diversity and Distributions, 2007, 13, 11-22.	4.1	295
10	Integrating ecosystem services into conservation assessments: A review. Ecological Economics, 2007, 63, 714-721.	5.7	292
11	Inferring Process from Pattern in Plant Invasions: A Semimechanistic Model Incorporating Propagule Pressure and Environmental Factors. American Naturalist, 2003, 162, 713-724.	2.1	275
12	INTERACTIONS BETWEEN ENVIRONMENT, SPECIES TRAITS, AND HUMAN USES DESCRIBE PATTERNS OF PLANT INVASIONS. Ecology, 2006, 87, 1755-1769.	3.2	272
13	Humanâ€mediated introductions of Australian acacias â€“ a global experiment in biogeography. Diversity and Distributions, 2011, 17, 771-787.	4.1	245
14	Spatial congruence between biodiversity and ecosystem services in South Africa. Biological Conservation, 2009, 142, 553-562.	4.1	240
15	Designing Large-Scale Conservation Corridors for Pattern and Process. Conservation Biology, 2006, 20, 549-561.	4.7	238
16	Current patterns of habitat transformation and future threats to biodiversity in terrestrial ecosystems of the Cape Floristic Region, South Africa. Biological Conservation, 2003, 112, 63-85.	4.1	232
17	Designing Systematic Conservation Assessments that Promote Effective Implementation: Best Practice from South Africa. Conservation Biology, 2006, 20, 739-750.	4.7	180
18	Rivers in peril inside and outside protected areas: a systematic approach to conservation assessment of river ecosystems. Diversity and Distributions, 2007, 13, 341-352.	4.1	173

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19	Mapping the potential ranges of major plant invaders in South Africa, Lesotho and Swaziland using climatic suitability. Diversity and Distributions, 2004, 10, 475-484.	4.1	163
20	Invasion debt â€“ quantifying future biological invasions. Diversity and Distributions, 2016, 22, 445-456.	4.1	160
21	Nationalâ€scale strategic approaches for managing introduced plants: insights from Australian acacias in South Africa. Diversity and Distributions, 2011, 17, 1060-1075.	4.1	157
22	Systematic conservation planning products for land-use planning: Interpretation for implementation. Biological Conservation, 2005, 125, 441-458.	4.1	152
23	Identifying priority areas for ecosystem service management in South African grasslands. Journal of Environmental Management, 2011, 92, 1642-1650.	7.8	142
24	The IUCN Red List of Ecosystems: Motivations, Challenges, and Applications. Conservation Letters, 2015, 8, 214-226.	5.7	141
25	Establishing IUCN Red List Criteria for Threatened Ecosystems. Conservation Biology, 2011, 25, 21-29.	4.7	132
26	Identifying spatial components of ecological and evolutionary processes for regional conservation planning in the Cape Floristic Region, South Africa. Diversity and Distributions, 2003, 9, 191-210.	4.1	130
27	An Assessment of Habitat Diversity and Transformation on La RÃ©union Island (Mascarene Islands,) Tj ETQq1 1 0.784314 rgBT /Over Conservation, 2005, 14, 3015-3032.	2.6	129
28	Examining the potential of Sentinel-2 MSI spectral resolution in quantifying above ground biomass across different fertilizer treatments. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 110, 55-65.	11.1	128
29	The current configuration of protected areas in the Cape Floristic Region, South Africaâ€"reservation bias and representation of biodiversity patterns and processes. Biological Conservation, 2003, 112, 129-145.	4.1	119
30	Potential impacts of future land use and climate change on the Red List status of the Proteaceae in the Cape Floristic Region, South Africa. Global Change Biology, 2005, 11, 1452-1468.	9.5	113
31	Reconstructing 50Âyears of Opuntia stricta invasion in the Kruger National Park, South Africa: environmental determinants and propagule pressure. Diversity and Distributions, 2004, 10, 427-437.	4.1	96
32	Title is missing!. Plant Ecology, 2001, 152, 79-92.	1.6	91
33	Protected-Area Boundaries as Filters of Plant Invasions. Conservation Biology, 2010, 25, no-no.	4.7	88
34	Nature Conservation Requires More than a Passion for Species. Conservation Biology, 2004, 18, 1674-1676.	4.7	87
35	Risk Assessment of Riparian Plant Invasions into Protected Areas. Conservation Biology, 2007, 21, 412-421.	4.7	85
36	Measuring, modeling and mapping ecosystem services in the Eastern Arc Mountains of Tanzania. Progress in Physical Geography, 2011, 35, 595-611.	3.2	84

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37	How do invasive species travel to and through urban environments?. Biological Invasions, 2017, 19, 3557-3570.	2.4	82
38	Measuring conservation value at fine and broad scales: implications for a diverse and fragmented region, the Agulhas Plain. Biological Conservation, 2003, 112, 217-232.	4.1	79
39	Species richness of alien plants in South Africa: Environmental correlates and the relationship with indigenous plant species richness. Ecoscience, 2005, 12, 391-402.	1.4	72
40	Current distribution and potential extent of the most invasive alien plant species on La Reunion (Indian Ocean, Mascarene islands). Austral Ecology, 2006, 31, 747-758.	1.5	69
41	Safeguarding Biodiversity and Ecosystem Services in the Little Karoo, South Africa. Conservation Biology, 2010, 24, 1021-1030.	4.7	66
42	Title is missing!. Biological Invasions, 2002, 4, 397-412.	2.4	64
43	Getting the biodiversity intactness index right: the importance of habitat degradation data. Global Change Biology, 2006, 12, 2032-2036.	9.5	63
44	Improving the Key Biodiversity Areas Approach for Effective Conservation Planning. BioScience, 2007, 57, 256-261.	4.9	62
45	Patterns of alien plant distribution at multiple spatial scales in a large national park: implications for ecology, management and monitoring. Diversity and Distributions, 2009, 15, 367-378.	4.1	58
46	Determinants of distribution of six Pinus species in Catalonia, Spain. Journal of Vegetation Science, 2001, 12, 491-502.	2.2	54
47	Understanding and managing the introduction pathways of alien taxa: South Africa as a case study. Biological Invasions, 2016, 18, 73-87.	2.4	54
48	A simple, rapid methodology for developing invasive species watch lists. Biological Conservation, 2014, 179, 25-32.	4.1	51
49	Relatedness defies biogeography: the tale of two island endemics (<i><scp>A</scp>cacia) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5C	7.3	49
50	How to build science-action partnerships for local land-use planning and management: lessons from Durban, South Africa. Ecology and Society, 2016, 21, .	2.3	47
51	Estimating Biomass of Native Grass Grown under Complex Management Treatments Using WorldView-3 Spectral Derivatives. Remote Sensing, 2017, 9, 55.	4.0	45
52	Alien plant invasionsâ€"incorporating emerging invaders in regional prioritization: A pragmatic approach for Southern Africa. Journal of Environmental Management, 2007, 84, 173-187.	7.8	44
53	Invasive alien plants and South African rivers: a proposed approach to the prioritization of control operations. Freshwater Biology, 2007, 52, 711-723.	2.4	42
54	Developing products for conservation decisionâ€making: lessons from a spatial biodiversity assessment for South Africa. Diversity and Distributions, 2007, 13, 608-619.	4.1	42

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55	Identifying and mapping biodiversity processes for conservation planning in islands: A case study in RÃ©union Island (Western Indian Ocean). Biological Conservation, 2009, 142, 1523-1535.	4.1	41
56	Comparing the spectral settings of the new generation broad and narrow band sensors in estimating biomass of native grasses grown under different management practices. GIScience and Remote Sensing, 2016, 53, 614-633.	5.9	41
57	Plant invasions as a biogeographical assay: Vegetation biomes constrain the distribution of invasive alien species assemblages. South African Journal of Botany, 2015, 101, 24-31.	2.5	38
58	Integrating freshwater and terrestrial priorities in conservation planning. Biological Conservation, 2009, 142, 2217-2226.	4.1	37
59	Towards Place-Based Research to Support Socialâ€“Ecological Stewardship. Sustainability, 2018, 10, 1434.	3.2	37
60	Discriminating Rangeland Management Practices Using Simulated HyspIRI, Landsat 8 OLI, Sentinel 2 MSI, and VENÂµS Spectral Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 3957-3969.	4.9	36
61	The Biogeography of South African Terrestrial Plant Invasions. , 2020, , 67-96.		34
62	Mapping Grazing-Induced Degradation in a Semi-Arid Environment: A Rapid and Cost Effective Approach for Assessment and Monitoring. Environmental Management, 2009, 43, 585-596.	2.7	33
63	Impacts of past habitat loss and future climate change on the range dynamics of South African Proteaceae. Diversity and Distributions, 2013, 19, 363-376.	4.1	33
64	Evaluating Private Land Conservation in the Cape Lowlands, South Africa. Conservation Biology, 2010, 24, 1182-1189.	4.7	32
65	Exploring the potential ofin situhyperspectral data and multivariate techniques in discriminating different fertilizer treatments in grasslands. Journal of Applied Remote Sensing, 2015, 9, 096033.	1.3	32
66	Native range size and growth form in Cactaceae predict invasiveness and impact. NeoBiota, 0, 30, 75-90.	1.0	32
67	Identifying ecosystem service hotspots for environmental management in Durban, South Africa. Bothalia, 2016, 46, .	0.3	30
68	Testing the capabilities of the new WorldView-3 space-borne sensorâ€™s red-edge spectral band in discriminating and mapping complex grassland management treatments. International Journal of Remote Sensing, 2017, 38, 1-22.	2.9	29
69	The balance of trade in alien species between South Africa and the rest of Africa. Bothalia, 2017, 47, .	0.3	29
70	Pollination ecosystem services in South African agricultural systems. South African Journal of Science, 2014, 110, 9.	0.7	28
71	Integrating conservation, restoration and land-use planning in islandsâ€”An illustrative case study in RÃ©union Island (Western Indian Ocean). Landscape and Urban Planning, 2011, 101, 120-130.	7.5	27
72	Using Natural Experiments in the Study of Alien Tree Invasions: Opportunities and Limitations. , 2004, , 180-201.		25

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73	Mapping alien and indigenous vegetation in the KwaZulu-Natal Sandstone Sourveld using remotely sensed data. Bothalia, 2016, 46, .	0.3	22
74	Predicting Incursion of Plant Invaders into Kruger National Park, South Africa: The Interplay of General Drivers and Species-Specific Factors. PLoS ONE, 2011, 6, e28711.	2.5	21
75	Managing a threatened savanna ecosystem (KwaZulu-Natal Sandstone Sourveld) in an urban biodiversity hotspot: Durban, South Africa. Bothalia, 2016, 46, .	0.3	21
76	meaning and practice of stewardship in South Africa. South African Journal of Science, 2019, 115, .	0.7	20
77	Collaborative stewardship in multifunctional landscapes: toward relational, pluralistic approaches. Ecology and Society, 2019, 24, .	2.3	20
78	Prioritising surveillance for alien organisms transported as stowaways on ships travelling to South Africa. PLoS ONE, 2017, 12, e0173340.	2.5	20
79	Measuring the effectiveness of regional conservation assessments at representing biodiversity surrogates at a local scale: A case study in RÃ©union Island (Indian Ocean). Austral Ecology, 2010, 35, 121-133.	1.5	16
80	Quantifying invasion degree by alien plants species in Reunion Island. Austral Ecology, 2021, 46, 1025-1037.	1.5	16
81	Forestry trial data can be used to evaluate climate-based species distribution models in predicting tree invasions. NeoBiota, 0, 20, 31-48.	1.0	16
82	Why are woody plants fleshyâ€fruited at low elevations? Evidence from a highâ€elevation oceanic island. Journal of Vegetation Science, 2018, 29, 847-858.	2.2	13
83	Relational Hubs for Collaborative Landscape Stewardship. Society and Natural Resources, 2020, 33, 681-693.	1.9	13
84	Landscape connectivity of the grassland biome in <scp>M</scp>pumalanga, <scp>S</scp>outh <scp>A</scp>frica. Austral Ecology, 2015, 40, 67-76.	1.5	12
85	Evaluating the outcomes and processes of a research-action partnership: The need for continuous reflective evaluation. Bothalia, 2016, 46, .	0.3	12
86	Effect of Land Cover and Ecosystem Mapping on Ecosystemâ€Risk Assessment in the Little Karoo, South Africa. Conservation Biology, 2013, 27, 531-541.	4.7	11
87	An Assessment of a Community-Based, Forest Restoration Programme in Durban (eThekwini), South Africa. Forests, 2017, 8, 255.	2.1	11
88	Restoration planning for climate change mitigation and adaptation in the city of Durban, South Africa. International Journal of Biodiversity Science, Ecosystem Services & Management, 2018, 14, 132-144.	2.9	11
89	Spatial analyses of threats to ecosystem service hotspots in Greater Durban, South Africa. PeerJ, 2018, 6, e5723.	2.0	11
90	An assessment of the information content of South African alien species databases. Bothalia, 2015, 45, .	0.3	10

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91	Rapid prioritization of alien plants for eradication based on climatic suitability and eradication feasibility. Austral Ecology, 2017, 42, 995-1005.	1.5	9
92	Civic Ecology Uplifts Low-Income Communities, Improves Ecosystem Services and Well-Being, and Strengthens Social Cohesion. Sustainability, 2021, 13, 1300.	3.2	9
93	The Importance of Grasslands in Providing Ecosystem Services. , 2016, , 421-441.		9
94	Border control for stowaway alien species should be prioritised based on variations in establishment debt. Journal of Environmental Management, 2016, 180, 301-309.	7.8	8
95	Diversity of pollen sources used by managed honey bees in variegated landscapes. Journal of Apicultural Research, 2020, 59, 988-999.	1.5	8
96	An impact assessment tool to identify, quantify and select optimal social-economic, ecological and health outcomes of civic environmental management interventions, in Durban South Africa. Journal of Environmental Management, 2022, 302, 113966.	7.8	8
97	Touristsâ€™ perceptions and willingness to pay for the control of <i>Opuntia stricta</i> invasion in protected areas: A case study from South Africa. Koedoe, 2014, 56, .	0.9	7
98	A spatial and temporal assessment of fire regimes on different vegetation types using MODIS burnt area products. Bothalia, 2016, 46, .	0.3	7
99	Assessing the role of dispersed floral resources for managed bees in providing supporting ecosystem services for crop pollination. PeerJ, 2018, 6, e5654.	2.0	7
100	Assessing habitat fragmentation of the KwaZulu-Natal Sandstone Sourveld, a threatened ecosystem. Bothalia, 2016, 46, .	0.3	6
101	Adaptive management in restoration initiatives: Lessons learned from some of South Africa's projects. South African Journal of Botany, 2021, 139, 352-361.	2.5	5
102	Improving the management of threatened ecosystems in an urban biodiversity hotspot through the Durban Research Action Partnership. Bothalia, 2023, 46, .	0.3	3
103	An assessment of biological control of Rubus alceifolius invasion on RÃ©union Island (Mascarene) Tj ETQq1 1 0.784314 rgBT /Overlo	3.0	2
104	Response to Hockley: The merit of economic and biological measures in conservation planning. Trends in Ecology and Evolution, 2007, 22, 287-288.	8.7	0
105	Can an El NiÃ±o induced drought hamper the reforestation of the subtropical forest?. South African Journal of Botany, 2021, 141, 152-157.	2.5	0
106	Improving the management of threatened ecosystems in an urban biodiversity hotspot through the Durban Research Action Partnership. Bothalia, 2016, 46, .	0.3	0