Sanjeev Gupta

List of Publications by Year
in descending order

114 papers	9,532 citations	36271 51 h-index	37183 96 g-index
117 all docs	117 docs citations	117 times ranked	5945 citing authors

#	Article	IF	Citations
1	Rivers and Lakes in Western Arabia Terra: The Fluvial Catchment of the ExoMars 2022 Rover Landing Site. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	9
2	Fluvial Depositional Systems of the African Humid Period: An Analog for an Early, Wet Mars in the Eastern Sahara. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	2
3	Burial and Exhumation of Sedimentary Rocks Revealed by the Base Stimson Erosional Unconformity, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	3
4	Billion-year exposure ages in Gale crater (Mars) indicate Mount Sharp formed before the Amazonian period. Earth and Planetary Science Letters, 2021, 554, 116667.	1.8	4
5	The Mars 2020 Perseverance Rover Mast Camera Zoom (Mastcam-Z) Multispectral, Stereoscopic Imaging Investigation. Space Science Reviews, 2021, 217, 24.	3.7	76
6	A Rock Record of Complex Aeolian Bedforms in a Hesperian Desert Landscape: The Stimson Formation as Exposed in the Murray Buttes, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006554.	1.5	34
7	A record of syn-tectonic sedimentation revealed by perched alluvial fan deposits in Valles Marineris, Mars. Geology, 2021, 49, 1250-1254.	2.0	14
8	New perspectives on the English Channel megaflood hypothesis: High-resolution multibeam and seabed camera imaging of submarine landforms in the Northern Palaeovalley. Geomorphology, 2021, 382, 107692.	1.1	0
9	Strongly heterogeneous patterns of groundwater depletion in Northwestern India. Journal of Hydrology, 2021, 598, 126492.	2.3	35
10	Stratigraphic Relationships in Jezero Crater, Mars: Constraints on the Timing of Fluvialâ€Lacustrine Activity From Orbital Observations. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006840.	1.5	20
11	Perseverance rover reveals an ancient delta-lake system and flood deposits at Jezero crater, Mars. Science, 2021, 374, 711-717.	6.0	86
12	Spatial variation of groundwater response to multiple drivers in a depleting alluvial aquifer system, northwestern India. Progress in Physical Geography, 2020, 44, 94-119.	1.4	28
13	Extraformational sediment recycling on Mars. , 2020, 16, 1508-1537.		20
14	Post-monsoon air quality degradation across Northern India: assessing the impact of policy-related shifts in timing and amount of crop residue burnt. Environmental Research Letters, 2020, 15, 104067.	2.2	56
15	Evidence for a Diagenetic Origin of Vera Rubin Ridge, Gale Crater, Mars: Summary and Synthesis of Curiosity's Exploration Campaign. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006527.	1.5	69
16	Photogeologic Map of the Perseverance Rover Field Site in Jezero Crater Constructed by the Mars 2020 Science Team. Space Science Reviews, 2020, 216, 1.	3.7	67
17	A Lacustrine Paleoenvironment Recorded at Vera RubinRidge, Gale Crater: Overview of the Sedimentology and Stratigraphy Observed by the Mars ScienceLaboratory Curiosity Rover. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006307.	1.5	69
18	The Chemostratigraphy of the Murray Formation and Role of Diagenesis at Vera Rubin Ridge in Gale Crater, Mars, as Observed by the ChemCam Instrument. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006320.	1.5	41

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19	Grain Size Variations in the Murray Formation: Stratigraphic Evidence for Changing Depositional Environments in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006230.	1.5	29
20	Aram Dorsum: An Extensive Midâ€Noachian Age Fluvial Depositional System in Arabia Terra, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006244.	1.5	19
21	A ROCK RECORD OF COMPLEX AEOLIAN BEDFORMS IN A HESPERIAN DESERT LANDSCAPE:THE STIMSON FORMATION AS EXPOSED IN THE MURRAY BUTTES, GALE CRATER, MARS. , 2020, , .		1
22	A Diverse Array of Fluvial Depositional Systems in Arabia Terra: Evidence for midâ€Noachian to Early Hesperian Rivers on Mars. Journal of Geophysical Research E: Planets, 2019, 124, 1913-1934.	1.5	48
23	The 2016 UK Space Agency Mars Utah Rover Field Investigation (MURFI). Planetary and Space Science, 2019, 165, 31-56.	0.9	7
24	Evidence for plunging river plume deposits in the Pahrump Hills member of the Murray formation, Gale crater, Mars. Sedimentology, 2019, 66, 1768-1802.	1.6	80
25	Middleâ€“Late Pleistocene landscape evolution of the Dover Strait inferred from buried and submerged erosional landforms. Quaternary Science Reviews, 2019, 203, 209-232.	1.4	8
26	Holocene landscape dynamics in the Ghaggar-Hakra palaeochannel region at the northern edge of the Thar Desert, northwest India. Quaternary International, 2019, 501, 317-327.	0.7	21
27	Ancient Martian aeolian processes and palaeomorphology reconstructed from the Stimson formation on the lower slope of Aeolis Mons, Gale crater, Mars. Sedimentology, 2018, 65, 993-1042.	1.6	143
28	Tracing groundwater recharge sources in the northwestern Indian alluvial aquifer using water isotopes (Î´18O, Î´2H and 3H). Journal of Hydrology, 2018, 559, 835-847.	2.3	118
29	Shaler: inÂsitu analysis of a fluvial sedimentary deposit on Mars. Sedimentology, 2018, 65, 96-122.	1.6	59
30	Stepped fans and facies-equivalent phyllosilicates in Coprates Catena, Mars. Icarus, 2018, 307, 260-280.	1.1	9
31	Desiccation cracks provide evidence of lake drying on Mars, Sutton Island member, Murray formation, Gale Crater. Geology, 2018, 46, 515-518.	2.0	71
32	Episodic and Declining Fluvial Processes in Southwest Melas Chasma, Valles Marineris, Mars. Journal of Geophysical Research E: Planets, 2018, 123, 2527-2549.	1.5	18
33	Geological Analysis of Martian Roverâ€Derived Digital Outcrop Models Using the 3â€D Visualization Tool, Planetary Robotics 3â€D Viewerâ€”PRo3D. Earth and Space Science, 2018, 5, 285-307.	1.1	28
34	The Hypanis Valles delta: The last highstand of a sea on early Mars?. Earth and Planetary Science Letters, 2018, 500, 225-241.	1.8	41
35	Clay mineral diversity and abundance in sedimentary rocks of Gale crater, Mars. Science Advances, 2018, 4, eaar3330.	4.7	150
36	Organic matter preserved in 3-billion-year-old mudstones at Gale crater, Mars. Science, 2018, 360, 1096-1101.	6.0	369

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37	Does slab-window opening cause uplift of the overriding plate? A case study from the Gulf of California. Tectonophysics, 2017, 719-720, 162-175.	0.9	5
38	Discussion on â€˜Tectonic and environmental controls on Palaeozoic fluvial environments: reassessing the impacts of early land plants on sedimentationâ€™ Journal of the Geological Society , London , https://doi.org/10.1144/jgs2016-063. Journal of the Geological Society, 2017, 174, 947-950.	0.9	30
39	Mineralogy of an ancient lacustrine mudstone succession from the Murray formation, Gale crater, Mars. Earth and Planetary Science Letters, 2017, 471, 172-185.	1.8	247
40	The PanCam Instrument for the ExoMars Rover. Astrobiology, 2017, 17, 511-541.	1.5	55
41	Diagenetic silica enrichment and lateâ€stage groundwater activity in Gale crater, Mars. Geophysical Research Letters, 2017, 44, 4716-4724.	1.5	87
42	Redox stratification of an ancient lake in Gale crater, Mars. Science, 2017, 356, .	6.0	209
43	Two-stage opening of the Dover Strait and the origin of island Britain. Nature Communications, 2017, 8, 15101.	5.8	47
44	Instrumentation Development for In Situ ⁴⁰Ar/³⁹Ar Planetary Geochronology. Geostandards and Geoanalytical Research, 2017, 41, 381-396.	1.7	6
45	Geologic overview of the Mars Science Laboratory rover mission at the Kimberley, Gale crater, Mars. Journal of Geophysical Research E: Planets, 2017, 122, 2-20.	1.5	60
46	Sedimentary processes of the Bagnold Dunes: Implications for the eolian rock record of Mars. Journal of Geophysical Research E: Planets, 2017, 122, 2544-2573.	1.5	83
47	Counter-intuitive influence of Himalayan river morphodynamics on Indus Civilisation urban settlements. Nature Communications, 2017, 8, 1617.	5.8	82
48	Encounters with an unearthly mudstone: Understanding the first mudstone found on Mars. Sedimentology, 2017, 64, 311-358.	1.6	48
49	Preserved Stratigraphic Architecture and Evolution of A Net-Transgressive Mixed Wave- and Tide-Influenced Coastal System: The Cliff House Sandstone, Northwestern New Mexico, U.S.A.. Journal of Sedimentary Research, 2016, 86, 1399-1424.	0.8	12
50	Mineralogy, provenance, and diagenesis of a potassic basaltic sandstone on Mars: CheMin Xâ€ray diffraction of the Windjana sample (Kimberley area, Gale Crater). Journal of Geophysical Research E: Planets, 2016, 121, 75-106.	1.5	159
51	Reply to the comment on â€œGeochemistry of buried river sediments from Ghaggar Plains, NW India: Multi-proxy records of variations in provenance, paleoclimate, and paleovegetation patterns in the Late Quaternaryâ€•by Singh et al. (2016), Palaeogeography, Palaeoclimatology, Palaeoecology 449 (2016) 85â€“100. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 455, 68-70.	1.0	3
52	Extensive Noachian fluvial systems in Arabia Terra: Implications for early Martian climate. Geology, 2016, 44, 847-850.	2.0	96
53	Linking the morphology of fluvial fan systems to aquifer stratigraphy in the Sutlejâ€Yamuna plain of northwest India. Journal of Geophysical Research F: Earth Surface, 2016, 121, 201-222.	1.0	45
54	Tectonic significance of Cenozoic exhumation and foreland basin evolution in the Western Alps. Tectonics, 2016, 35, 1892-1912.	1.3	11

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55	The potassic sedimentary rocks in Gale Crater, Mars, as seen by ChemCam on board Curiosity. Journal of Geophysical Research E: Planets, 2016, 121, 784-804.	1.5	67
56	Characteristics of pebble and cobble-sized clasts along the Curiosity rover traverse from sol 100 to 750: Terrain types, potential sources, and transport mechanisms. Icarus, 2016, 280, 72-92.	1.1	19
57	Comparing orbiter and rover image-based mapping of an ancient sedimentary environment, Aeolis Palus, Gale crater, Mars. Icarus, 2016, 280, 3-21.	1.1	57
58	Large wind ripples on Mars: A record of atmospheric evolution. Science, 2016, 353, 55-58.	6.0	144
59	Geochemistry of buried river sediments from Ghaggar Plains, NW India: Multi-proxy records of variations in provenance, paleoclimate, and paleovegetation patterns in the Late Quaternary. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 449, 85-100.	1.0	47
60	Chemical variations in Yellowknife Bay formation sedimentary rocks analyzed by ChemCam on board the Curiosity rover on Mars. Journal of Geophysical Research E: Planets, 2015, 120, 452-482.	1.5	51
61	Fault activity in the epicentral area of the 1580 Dover Strait (Pas-de-Calais) earthquake (northwestern) Tj ETQq1 1 0.784314 rgBT /Ov	1.0	18
62	Quantifying geological processes on Marsâ€"Results of the high resolution stereo camera (HRSC) on Mars express. Planetary and Space Science, 2015, 112, 53-97.	0.9	63
63	Streamlined islands and the English Channel megaflood hypothesis. Global and Planetary Change, 2015, 135, 190-206.	1.6	24
64	Evidence for indigenous nitrogen in sedimentary and aeolian deposits from the Curiosity rover investigations at Gale crater, Mars. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4245-4250.	3.3	172
65	Deposition, exhumation, and paleoclimate of an ancient lake deposit, Gale crater, Mars. Science, 2015, 350, aac7575.	6.0	471
66	Minimum effective area for high resolution crater counting of martian terrains. Icarus, 2015, 245, 198-240.	1.1	103
67	ChemCam results from the Shaler outcrop in Gale crater, Mars. Icarus, 2015, 249, 2-21.	1.1	52
68	Mechanisms and timescales of fluvial activity at Mojave and other young Martian craters. Journal of Geophysical Research E: Planets, 2014, 119, 604-634.	1.5	18
69	The origin and evolution of the Peace Vallis fan system that drains to the Curiosity landing area, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 705-728.	1.5	112
70	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	6.0	323
71	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	6.0	687
72	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	6.0	508

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73	Marsâ€™ Surface Radiation Environment Measured with the Mars Science Laboratoryâ€™s Curiosity Rover. Science, 2014, 343, 1244797.	6.0	475
74	In Situ Radiometric and Exposure Age Dating of the Martian Surface. Science, 2014, 343, 1247166.	6.0	224
75	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.	6.0	246
76	Calibrating Mars Orbiter Laser Altimeter pulse widths at Mars Science Laboratory candidate landing sites. Planetary and Space Science, 2014, 99, 118-127.	0.9	2
77	Overview of the Mars Science Laboratory mission: Bradbury Landing to Yellowknife Bay and beyond. Journal of Geophysical Research E: Planets, 2014, 119, 1134-1161.	1.5	104
78	Rift flank uplift at the Gulf of California: No requirement for asthenospheric upwelling. Geology, 2014, 42, 259-262.	2.0	24
79	Multi-resolution digital terrain models and their potential for Mars landing site assessments. Planetary and Space Science, 2013, 85, 89-105.	0.9	4
80	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	6.0	367
81	Geo-electric resistivity evidence for subsurface palaeochannel systems adjacent to Harappan sites in northwest India. Quaternary International, 2013, 308-309, 66-75.	0.7	53
82	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	6.0	326
83	Fill and spill of giant lakes in the eastern Valles Marineris region of Mars. Geology, 2013, 41, 675-678.	2.0	58
84	Hydraulic modeling of a distributary channel of Athabasca Valles, Mars, using a highâ€resolution digital terrain model. Journal of Geophysical Research, 2012, 117, .	3.3	14
85	Formation of an Hesperian-aged sedimentary basin containing phyllosilicates in Coprates Catena, Mars. Icarus, 2012, 218, 178-195.	1.1	26
86	Constraints on the origin and evolution of Iani Chaos, Mars. Journal of Geophysical Research, 2011, 116, .	3.3	28
87	Influence of fault-controlled topography on fluvio-deltaic sedimentary systems in Eberswalde crater, Mars. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	18
88	Timescales of alluvial fan development by precipitation on Mars. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	26
89	Improved provenance tracing of Asian dust sources using rare earth elements and selected trace elements for palaeomonsoon studies on the eastern Tibetan Plateau. Geochimica Et Cosmochimica Acta, 2011, 75, 6374-6399.	1.6	165
90	Martian Geomorphology: introduction. Geological Society Special Publication, 2011, 356, 1-3.	0.8	2

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91	Fill and spill in Lethe Vallis: a recent flood-routing system in Elysium Planitia, Mars. Geological Society Special Publication, 2011, 356, 203-227.	0.8	7
92	Retreat of a giant cataract in a long-lived (3.7â€“2.6 Ga) martian outflow channel. Geology, 2010, 38, 791-794.	2.0	30
93	Hesperian equatorial thermokarst lakes in Ares Vallis as evidence for transient warm conditions on Mars. Geology, 2010, 38, 71-74.	2.0	37
94	Late Noachian to Hesperian climate change on Mars: Evidence of episodic warming from transient crater lakes near Ares Vallis. Journal of Geophysical Research, 2010, 115, .	3.3	57
95	The influence of bend amplitude and planform morphology on flow and sedimentation in submarine channels. Marine and Petroleum Geology, 2010, 27, 1431-1447.	1.5	53
96	A refined chronology of catastrophic outflow events in Ares Vallis, Mars. Earth and Planetary Science Letters, 2009, 288, 58-69.	1.8	57
97	Facies architecture of a net transgressive sandstone reservoir analog: The Cretaceous Hosta Tongue, New Mexico. AAPG Bulletin, 2008, 92, 513-547.	0.7	51
98	Flow processes and sedimentation in submarine channel bends. Marine and Petroleum Geology, 2007, 24, 470-486.	1.5	109
99	Transient landscapes at fault tips. Journal of Geophysical Research, 2007, 112, .	3.3	56
100	Catastrophic flooding origin of shelf valley systems in the English Channel. Nature, 2007, 448, 342-345.	13.7	220
101	Using bathymetry to identify basin inversion structures on the English Channel shelf. Geology, 2006, 34, 1001.	2.0	15
102	What sets topographic relief in extensional footwalls?. Geology, 2005, 33, 453.	2.0	48
103	Clinoform nucleation and growth in coarse-grained deltas, Loreto basin, Baja California Sur, Mexico: a response to episodic accelerations in fault displacement. Basin Research, 2005, 17, 337-359.	1.3	43
104	Deformed streams reveal growth and linkage of a normal fault array in the Canyonlands graben, Utah. Geology, 2005, 33, 645.	2.0	22
105	Footwall topographic development during continental extension. Journal of Geophysical Research, 2004, 109, .	3.3	79
106	Landscape evolution at extensional relay zones. Journal of Geophysical Research, 2003, 108, .	3.3	34
107	Repeated cycles of submarine channel incision, infill and transition to sheet sandstone development in the Alpine Foreland Basin, SE France. Sedimentology, 2002, 49, 623-635.	1.6	33
108	Implications of fault array evolution for synrift depocentre development: insights from a numerical fault growth model. Basin Research, 2000, 12, 241-261.	1.3	90

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109	INVITED EDITORIAL Processes and controls in the stratigraphic development of extensional basins. Basin Research, 2000, 12, 185-194.	1.3	7
110	Implications of foreland paleotopography for stratigraphic development in the Eocene distal Alpine foreland basin. Bulletin of the Geological Society of America, 2000, 112, 515-530.	1.6	46
111	Implications of fault array evolution for synrift depocentre development: insights from a numerical fault growth model. Basin Research, 2000, 12, 241-261.	1.3	132
112	INVITED EDITORIAL Processes and controls in the stratigraphic development of extensional basins. Basin Research, 2000, 12, 185-194.	1.3	25
113	Controls on sedimentation in distal margin palaeovalleys in the Early Tertiary Alpine foreland basin, southâ€eastern France. Sedimentology, 1999, 46, 357-384.	1.6	23
114	Fossil shore platforms and drowned gravel beaches; evidence for high-frequency sea-level fluctuations in the distal Alpine foreland basin. Journal of Sedimentary Research, 1999, 69, 394-413.	0.8	18