

# Nabil Sultan

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

4,132  
citations

126708

33  
h-index

114278

63  
g-index

83  
all docs

83  
docs citations

83  
times ranked

2779  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Effect of gas hydrates melting on seafloor slope instability. <i>Marine Geology</i> , 2004, 213, 379-401.   | 0.9 | 389       |
| 2  | Slope failure dynamics and impacts from seafloor and shallow sub-seafloor geophysical data: case studies from the COSTA project. <i>Marine Geology</i> , 2004, 213, 9-72.                               | 0.9 | 348       |
| 3  | Triggering mechanisms of slope instability processes and sediment failures on continental margins: a geotechnical approach. <i>Marine Geology</i> , 2004, 213, 291-321.                                 | 0.9 | 285       |
| 4  | On the thermal consolidation of Boom clay. <i>Canadian Geotechnical Journal</i> , 2000, 37, 343-354.  | 1.4 | 281       |
| 5  | Temperature effects on the volume change behaviour of Boom clay. <i>Engineering Geology</i> , 2002, 64, 135-145.  | 2.9 | 254       |
| 6  | A thermomechanical model for saturated clays. <i>Canadian Geotechnical Journal</i> , 2000, 37, 607-620.   | 1.4 | 228       |
| 7  | Sr/Ca and Mg/Ca ratios in Niger Delta sediments: Implications for authigenic carbonate genesis in cold seep environments. <i>Marine Geology</i> , 2007, 241, 93-109.                                    | 0.9 | 160       |
| 8  | The 1979 Nice harbour catastrophe revisited: Trigger mechanism inferred from geotechnical measurements and numerical modelling. <i>Marine Geology</i> , 2007, 245, 40-64.                               | 0.9 | 158       |
| 9  | Seafloor instabilities and sediment deformation processes: The need for integrated, multi-disciplinary investigations. <i>Marine Geology</i> , 2014, 352, 183-214.                                      | 0.9 | 110       |
| 10 | Hydrate dissolution as a potential mechanism for pockmark formation in the Niger delta. <i>Journal of Geophysical Research</i> , 2010, 115, .   | 3.3 | 109       |
| 11 | Pockmark formation and evolution in deep water Nigeria: Rapid hydrate growth versus slow hydrate dissolution. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 2679-2694.               | 1.4 | 91        |
| 12 | 26th December 2004 great Sumatra-Andaman earthquake: Co-seismic and post-seismic motions in northern Sumatra. <i>Earth and Planetary Science Letters</i> , 2007, 263, 88-103.                           | 1.8 | 86        |
| 13 | Sea-level change and free gas occurrence influencing a submarine landslide and pockmark formation and distribution in deepwater Nigeria. <i>Earth and Planetary Science Letters</i> , 2013, 375, 78-91. | 1.8 | 67        |
| 14 | A review of undulated sediment features on Mediterranean prodeltas: distinguishing sediment transport structures from sediment deformation. <i>Marine Geophysical Researches</i> , 2011, 32, 49-69.     | 0.5 | 58        |
| 15 | The role of sedimentation rate and permeability in the slope stability of the formerly glaciated Norwegian continental margin: the Storegga slide model. <i>Landslides</i> , 2007, 4, 297-309.          | 2.7 | 57        |
| 16 | Investigation of a possible submarine landslide at the Var delta front (Nice continental slope,)  | 1.4 | 57        |
| 17 | Mechanical behaviour of gas-charged marine plastic sediments. <i>Geotechnique</i> , 2012, 62, 751-766.  | 2.2 | 56        |
| 18 | U-Th isotope constraints on gas hydrate and pockmark dynamics at the Niger delta margin. <i>Marine Geology</i> , 2015, 370, 87-98.  | 0.9 | 56        |

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|----|---|-----|-----------|
| 19 | Freshwater lake to salt-water sea causing widespread hydrate dissociation in the Black Sea. <i>Nature Communications</i> , 2018, 9, 117.  | 5.8 | 56        |
| 20 | Sinuuous pockmark belt as indicator of a shallow buried turbiditic channel on the lower slope of the Congo basin, West African margin. <i>Geological Society Special Publication</i> , 2003, 216, 173-189.              | 0.8 | 55        |
| 21 | Detection of free gas and gas hydrate based on 3D seismic data and cone penetration testing: An example from the Nigerian Continental Slope. <i>Marine Geology</i> , 2007, 240, 235-255.                                | 0.9 | 55        |
| 22 | The 100ka and rapid sea level changes recorded by prograding shelf sand bodies in the Gulf of Lions (western Mediterranean Sea). <i>Geochemistry, Geophysics, Geosystems</i> , 2008, 9, .                               | 1.0 | 54        |
| 23 | Gas hydrate distributions in sediments of pockmarks from the Nigerian margin – Results and interpretation from shallow drilling. <i>Marine and Petroleum Geology</i> , 2015, 59, 359-370.                               | 1.5 | 52        |
| 24 | Yielding and plastic behaviour of Boom clay. <i>Geotechnique</i> , 2010, 60, 657-666.   | 2.2 | 48        |
| 25 | Dynamics of gas hydrate: case of the Congo continental slope. <i>Marine Geology</i> , 2004, 206, 1-18.  | 0.9 | 46        |
| 26 | Potential role of compressional structures in generating submarine slope failures in the Niger Delta. <i>Marine Geology</i> , 2007, 237, 169-190.   | 0.9 | 45        |
| 27 | Initiation of gas-hydrate pockmark in deep-water Nigeria: Geo-mechanical analysis and modelling. <i>Earth and Planetary Science Letters</i> , 2016, 434, 252-263.   | 1.8 | 44        |
| 28 | Morphological control of slope instability in contourites: a geotechnical approach. <i>Landslides</i> , 2018, 15, 1085-1095.  | 2.7 | 43        |
| 29 | Analysis of slope failures in submarine canyon heads: An example from the Gulf of Lions. <i>Journal of Geophysical Research</i> , 2007, 112, .  | 3.3 | 42        |
| 30 | Hydrogeology and its effect on slope stability along the coastal aquifer of Nice, France. <i>Marine Geology</i> , 2011, 280, 168-181.   | 0.9 | 41        |
| 31 | Mechanical behaviour of gas-charged fine sediments: model formulation and calibration. <i>Geotechnique</i> , 2014, 64, 851-864.   | 2.2 | 37        |
| 32 | Comment on “Excess pore pressure resulting from methane hydrate dissociation in marine sediments: A theoretical approach” by Wenyue Xu and Leonid N. Germanovich. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 36        |
| 33 | Microevents produced by gas migration and expulsion at the seabed: a study based on sea bottom recordings from the Sea of Marmara. <i>Geophysical Journal International</i> , 2012, 190, 993-1007.                      | 1.0 | 35        |
| 34 | Mechanical behaviour of unsaturated marine sediments: experimental and theoretical approaches. <i>Marine Geology</i> , 2004, 213, 323-342.  | 0.9 | 34        |
| 35 | 3-D slope stability analysis: A probability approach applied to the nice slope (SE France). <i>Marine Geology</i> , 2010, 269, 89-106.  | 0.9 | 34        |
| 36 | Impact of tides and sea-level on deep-sea Arctic methane emissions. <i>Nature Communications</i> , 2020, 11, 5087.  | 5.8 | 34        |

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|----|---|-----|-----------|
| 37 | Quantifying the role of sandy-silty sediments in generating slope failures during earthquakes: example from the Algerian margin. <i>International Journal of Earth Sciences</i> , 2009, 98, 769-789.                            | 0.9 | 29        |
| 38 | A geomechanical approach for the genesis of sediment undulations on the Adriatic shelf. <i>Geochemistry, Geophysics, Geosystems</i> , 2008, 9, .  | 1.0 | 27        |
| 39 | Empirical expressions for gas hydrate stability law, its volume fraction and mass-density at temperatures 273.15K to 290.15K. <i>Geochemical Journal</i> , 2008, 42, 163-175.   | 0.5 | 27        |
| 40 | Failure mechanisms of Ana Slide from geotechnical evidence, Eivissa Channel, Western Mediterranean Sea. <i>Marine Geology</i> , 2012, 307-310, 1-21.  | 0.9 | 27        |
| 41 | Dynamics of fault-fluid-hydrate system around a shale-cored anticline in deepwater Nigeria. <i>Journal of Geophysical Research</i> , 2011, 116, .   | 3.3 | 26        |
| 42 | Overpressure within upper continental slope sediments from CPTU data, Gulf of Lion, NW Mediterranean Sea. <i>International Journal of Earth Sciences</i> , 2009, 98, 751-768.   | 0.9 | 21        |
| 43 | New insights into the transport processes controlling the sulfate-methane-transition-zone near methane vents. <i>Scientific Reports</i> , 2016, 6, 26701.   | 1.6 | 20        |
| 44 | Focused hydrocarbon migration in shallow sediments of a pockmark cluster in the Niger Delta (Off) Tj ETQq0 0 0 rgBT /Overlock 10 Tff  | 1.8 | 19        |
| 45 | Sediment damage caused by gas exsolution: A key mechanism for mud volcano formation. <i>Engineering Geology</i> , 2019, 263, 105313.  | 2.9 | 19        |
| 46 | Anomalously Deep BSR Related to a Transient State of the Gas Hydrate System in the Western Black Sea. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 442-459.  | 1.0 | 19        |
| 47 | Deep-towed High Resolution multichannel seismic imaging. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2014, 93, 83-90.  | 0.6 | 18        |
| 48 | Deep sea in situ excess pore pressure and sediment deformation off NW Sumatra and its relation with the December 26, 2004 Great Sumatra-Andaman Earthquake. <i>International Journal of Earth Sciences</i> , 2009, 98, 823-837. | 0.9 | 17        |
| 49 | Post-glacial persistence of turbiditic activity within the RhÃne deep-sea turbidite system (Gulf of) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tff<br><i>Geology</i> , 2009, 257, 65-86.  | 0.9 | 17        |
| 50 | Influence of early diagenesis on geotechnical properties of clay sediments (Romania, Black Sea). <i>Engineering Geology</i> , 2018, 240, 175-188.   | 2.9 | 17        |
| 51 | Analysis of submarine slumping in the Gabon continental slope. <i>AAPG Bulletin</i> , 2004, 88, 781-799.  | 0.7 | 15        |
| 52 | Evaluation of the Risk of Marine Slope Instability: A Pseudo-3D Approach for Application to Large Areas. <i>Marine Georesources and Geotechnology</i> , 2001, 19, 107-133.  | 1.2 | 14        |
| 53 | Numerical modeling of bottom trawling-induced sediment transport and accumulation in La Fonera submarine canyon, northwestern Mediterranean Sea. <i>Marine Geology</i> , 2017, 386, 107-125.                                    | 0.9 | 13        |
| 54 | Hydromechanical Properties of Gas Hydrate-bearing Fine Sediments From In Situ Testing. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 9615-9634.  | 1.4 | 12        |

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|----|--|-----|-----------|
| 55 | In situ equilibrium pore-water pressures derived from partial piezoprobe dissipation tests in marine sediments. <i>Canadian Geotechnical Journal</i> , 2013, 50, 1294-1305.                                | 1.4 | 11        |
| 56 | Irregular BSR: Evidence of an Ongoing Reequilibrium of a Gas Hydrate System. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089906.  | 1.5 | 11        |
| 57 | Evolution Model for the Absheron Mud Volcano: From In Situ Observations to Numerical Modeling. <i>Journal of Geophysical Research F: Earth Surface</i> , 2019, 124, 766-794.                               | 1.0 | 10        |
| 58 | Shallow Gas Hydrate Accumulations at a Nigerian Deepwater Pockmark: Quantities and Dynamics. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018283.                               | 1.4 | 10        |
| 59 | Altered volcanic deposits as basal failure surfaces of submarine landslides. <i>Geology</i> , 2018, 46, 663-666.   | 2.0 | 9         |
| 60 | Submarine Landslides Along the Algerian Margin: A Review of Their Occurrence and Potential Link with Tectonic Structures. , 2010, , 515-525.   |     | 8         |
| 61 | Pore Habit of Gas in Gassy Sediments. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB021511.  | 1.4 | 8         |
| 62 | A Long-term Monitoring Array for Landslide Precursors: A Case Study at the Ligurian Slope (Western) Tj ETQq0 0 0 rgBT /Overplock 10 Tf   |     |           |
| 63 | A multi-disciplinary approach to marine shallow geohazard assessment. <i>Near Surface Geophysics</i> , 2012, 10, 279-288.  | 0.6 | 6         |
| 64 | Seafloor depressions on the Nigerian margin: Seabed morphology and sub-seabed hydrate distribution. <i>Marine and Petroleum Geology</i> , 2020, 114, 104175.   | 1.5 | 6         |
| 65 | Transient Groundwater Flow Through a Coastal Confined Aquifer and Its Impact on Nearshore Submarine Slope Instability. <i>Journal of Geophysical Research F: Earth Surface</i> , 2020, 125, e2020JF005654. | 1.0 | 6         |
| 66 | The Penfeld seabed penetrometer. , 2005, , .   |     | 5         |
| 67 | Mass-Transport Deposits on the Algerian Margin (Algiers Area): Morphology, Lithology and Sedimentary Processes. , 2010, , 527-539.   |     | 5         |
| 68 | Identification of Shear Zones and Their Causal Mechanisms Using a Combination of Cone Penetration Tests and Seismic Data in the Eastern Niger Delta. , 2010, , 55-65.                                      |     | 5         |
| 69 | Comportement thermomécanique de l'argile de Boom. <i>Comptes Rendus Mécanique</i> , 2000, 328, 457-463.  | 0.2 | 4         |
| 70 | Evaluation of the Risk of Marine Slope Instability: A Pseudo-3D Approach for Application to Large Areas. <i>Marine Georesources and Geotechnology</i> , 2001, 19, 107-133.                                 | 1.2 | 4         |
| 71 | Subseafloor stratigraphic profiling and soil classification from piezocone tests: A case study in the Gulf of Lion (NW Mediterranean Sea). <i>Geochemistry, Geophysics, Geosystems</i> , 2008, 9, .        | 1.0 | 4         |
| 72 | Semi-quantitative Analysis of Factors Affecting Gas Hydrate Formation Conditions and Its Fractions. <i>Chinese Journal of Geophysics</i> , 2008, 51, 97-104.   | 0.2 | 3         |

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|----|---|-----|-----------|
| 73 | Creep-dilatancy development at a transform plate boundary. Nature Communications, 2022, 13, 1913.   | 5.8 | 3         |
| 74 | Surconsolidation apparente et pression osmotique dans un sÃ©diment marin. Comptes Rendus De L'AcadÃ©mie Des Sciences Earth & Planetary Sciences SÃ©rie II, Sciences De La Terre Et Des PlanÃ©tes =, 2000, 331, 379-386.   | 0.2 | 2         |
| 75 | Evolution Model for the Absheron Mud Volcano: From Stratified Sediments to Fluid Mud Generation. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2020JF005623.  | 1.0 | 2         |
| 76 | Comment on "Sedimentation Controls on Methane Hydrate Dynamics Across Glacial/Interglacial Stages: An Example From International Ocean Discovery Program Site U1517, Hikurangi Margin" by E.Å. Screatton et al.. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008846. | 1.0 | 2         |
| 77 | Detailed Analysis of a Submarine Landslide (SAR-27) in the Deep Basin Offshore Algiers (Western) Tj ETQq1 1 0.784314 rgBT <sub>1</sub> Overload   |     |           |
| 78 | Numerical analysis of piezocone penetrometer testing in partially saturated marine sediments. , 2008, , 841-846.  |     | 0         |
| 79 | Assessing Spatio-temporal Variability of Free Gas in Surficial Cohesive Sediments Using Tidal Pressure Fluctuations. Journal of Geophysical Research F: Earth Surface, 2021, 126, .   | 1.0 | 0         |
| 80 | Distinguishing Sediment Bedforms from Sediment Deformation in Prodeltas of the Mediterranean Sea. , 2012, , 233-244.  |     | 0         |