

Frank J Grunthaner

List of Publications by Year in descending order

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Version: 2024-02-01

30
papers

1,652
citations

516710

16
h-index

610901

24
g-index

31
all docs

31
docs citations

31
times ranked

1684
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Mars-Like Soils in the Atacama Desert, Chile, and the Dry Limit of Microbial Life. <i>Science</i> , 2003, 302, 1018-1021. | 12.6 | 545 |
| 2 | Development and evaluation of a microdevice for amino acid biomarker detection and analysis on Mars. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 1041-1046. | 7.1 | 257 |
| 3 | Sulfate minerals and organic compounds on Mars. <i>Geology</i> , 2006, 34, 357. | 4.4 | 138 |
| 4 | Perchlorate Radiolysis on Mars and the Origin of Martian Soil Reactivity. <i>Astrobiology</i> , 2013, 13, 515-520. | 3.0 | 135 |
| 5 | Enhanced Amine and Amino Acid Analysis Using Pacific Blue and the Mars Organic Analyzer Microchip Capillary Electrophoresis System. <i>Analytical Chemistry</i> , 2009, 81, 2537-2544. | 6.5 | 87 |
| 6 | Growth of a delta-doped silicon layer by molecular beam epitaxy on a charge-coupled device for reflection-limited ultraviolet quantum efficiency. <i>Applied Physics Letters</i> , 1992, 61, 1084-1086. | 3.3 | 70 |
| 7 | Organic amine biomarker detection in the Yungay region of the Atacama Desert with the Urey instrument. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 49 |
| 8 | Monolithic Teflon® membrane valves and pumps for harsh chemical and low-temperature use. <i>Lab on A Chip</i> , 2007, 7, 1469. | 6.0 | 45 |
| 9 | Subcritical water extraction of amino acids from Atacama Desert soils. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 45 |
| 10 | The Urey Instrument: An Advanced In Situ Organic and Oxidant Detector for Mars Exploration. <i>Astrobiology</i> , 2008, 8, 583-595. | 3.0 | 40 |
| 11 | <title>Delta-doped CCDs: high QE with long-term stability at UV and visible wavelengths</title>. , 1994, , . | | 36 |
| 12 | Capillary Electrophoresis Analysis of Organic Amines and Amino Acids in Saline and Acidic Samples Using the Mars Organic Analyzer. <i>Astrobiology</i> , 2009, 9, 823-831. | 3.0 | 33 |
| 13 | Monolithic photolithographically patterned Fluorocurâ„¢ PFPE membrane valves and pumps for in situ planetary exploration. <i>Lab on A Chip</i> , 2008, 8, 1024. | 6.0 | 25 |
| 14 | Subcritical Water Extractor for Mars Analog Soil Analysis. <i>Astrobiology</i> , 2008, 8, 597-604. | 3.0 | 24 |
| 15 | New strategies to detect life on Mars. <i>Astronomy and Geophysics</i> , 2005, 46, 6.26-6.27. | 0.2 | 23 |
| 16 | Stability of hydroxylated minerals on Mars: A study on the effects of exposure to ultraviolet radiation. <i>Journal of Geophysical Research</i> , 1999, 104, 27031-27041. | 3.3 | 21 |
| 17 | Sulfur 2p photoelectron spectrum of Limulus oxyhemocyanin. Reply to observations on the ESCA spectra of plastocyanins. <i>Journal of the American Chemical Society</i> , 1977, 99, 1257-1258. | 13.7 | 16 |
| 18 | The effect of strain-induced polarization fields on impact ionization in a multi-quantum-well structure. <i>Applied Physics Letters</i> , 1998, 73, 2784-2786. | 3.3 | 16 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | <title>Epitaxial growth of p+ silicon on a backside-thinned CCD for enhanced UV response</title>. , 1992, 1656, 488. | | 11 |
| 20 | Correlations between the interfacial chemistry and current-voltage behavior of n-GaAs/liquid junctions. Applied Physics Letters, 1990, 57, 1242-1244. | 3.3 | 5 |
| 21 | <title>Delta-doped CCDs for enhanced UV performance</title>. , 1994, 2278, 138. | | 5 |
| 22 | <title>Delta-doped CCDs as stable, high-sensitivity, high-resolution UV imaging arrays</title>. , 1994, , . | | 5 |
| 23 | <title>Mars Organic Detector III: a versatile instrument for detection of bio-organic signatures on Mars</title>. , 2003, 4878, 59. | | 4 |
| 24 | An atmospheric oxidation monitor based on in situ thin-film deposition. Sensors and Actuators B: Chemical, 2006, 114, 841-848. | 7.8 | 3 |
| 25 | A microfluidic sub-critical water extraction instrument. Review of Scientific Instruments, 2017, 88, 114101. | 1.3 | 3 |
| 26 | Micro acoustic resonant chambers for heating/agitating/mixing (MARCHAM). Proceedings of SPIE, 2016, , . | 0.8 | 2 |
| 27 | Astrobiology Special Collection: Instruments for <i>In Situ</i> Exploration of Planets. Astrobiology, 2008, 8, 569-570. | 3.0 | 1 |
| 28 | Mars-Like Soils in the Yungay Area, the Driest Core of the Atacama Desert in Northern Chile. Cellular Origin and Life in Extreme Habitats, 2004, , 211-216. | 0.3 | 1 |
| 29 | Nano-Fabricated Size Exclusion Chromatograph. , 2002, , 545-547. | | 1 |
| 30 | Auger Electron Spectroscopy. Reliability Physics Symposium, 1976, , . | 0.0 | 0 |