

# Chaim N Sukenik

## List of Publications by Year in descending order

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91  
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3,738  
citations

147801

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91  
docs citations

91  
times ranked

3939  
citing authors

#	ARTICLE	IF	CITATIONS
1	Alkyl Phosphonate/Phosphate Coating on Magnetite Nanoparticles: A Comparison with Fatty Acids. <i>Langmuir</i> , 2001, 17, 7907-7911.	3.5	431
2	Monolayer transformation by nucleophilic substitution: Applications to the creation of new monolayer assemblies. <i>Langmuir</i> , 1990, 6, 1621-1627.	3.5	325
3	In Situ FTIR-ATR Analysis and Titration of Carboxylic Acid-Terminated SAMs. <i>Journal of the American Chemical Society</i> , 2004, 126, 482-483.	13.7	136
4	Acid-Base Properties and Zeta Potentials of Self-Assembled Monolayers Obtained via in Situ Transformations. <i>Langmuir</i> , 2004, 20, 8693-8698.	3.5	130
5	Cell-Type-Specific adhesion mechanisms mediated by fibronectin adsorbed to chemically derivatized substrata. <i>Journal of Biomedical Materials Research Part B</i> , 1992, 26, 1343-1363.	3.1	117
6	Low temperature deposition of patterned TiO <sub>2</sub> thin films using photopatterned self-assembled monolayers. <i>Applied Physics Letters</i> , 1996, 69, 860-862.	3.3	116
7	Effects of Substrate Surface Functionality on Solution-Deposited Titania Films. <i>Chemistry of Materials</i> , 2002, 14, 2476-2485.	6.7	114
8	The Conformation of Fibronectin on Self-Assembled Monolayers with Different Surface Composition: An FTIR/ATR Study. <i>Journal of Colloid and Interface Science</i> , 1994, 162, 135-143.	9.4	111
9	Fountain pen nanochemistry: Atomic force control of chrome etching. <i>Applied Physics Letters</i> , 1999, 75, 2689-2691.	3.3	105
10	Modulation of fibronectin adhesive functions for fibroblasts and neural cells by chemically derivatized substrata. <i>Journal of Cellular Physiology</i> , 1989, 141, 334-345.	4.1	99
11	A kinetic and x-ray diffraction study of the solid state rearrangement of methyl p-dimethylaminobenzenesulfonate. Reaction rate enhancement due to proper orientation in a crystal. <i>Journal of the American Chemical Society</i> , 1977, 99, 851-858.	13.7	98
12	Modulation of cell adhesion by modification of titanium surfaces with covalently attached self-assembled monolayers. <i>Journal of Biomedical Materials Research Part B</i> , 1990, 24, 1307-1323.	3.1	83
13	Self-Assembled Monolayer Coatings on Amorphous Iron and Iron Oxide Nanoparticles: Thermal Stability and Chemical Reactivity Studies. <i>Langmuir</i> , 1997, 13, 6151-6158.	3.5	83
14	Protein printing with an atomic force sensing nanofountainpen. <i>Applied Physics Letters</i> , 2003, 83, 1041-1043.	3.3	82
15	Creation and characterization of n-alkylthiol and n-alkylamine self-assembled monolayers on 316L stainless steel. <i>Thin Solid Films</i> , 2002, 419, 95-104.	1.8	72
16	Performance Impact of Monolayer Coating of Polysilicon Micromotors. <i>Journal of the Electrochemical Society</i> , 1995, 142, 1278-1285.	2.9	71
17	Thin Film Oxide Barrier Layers: Protection of Kapton from Space Environment by Liquid Phase Deposition of Titanium Oxide. <i>ACS Applied Materials &amp; Interfaces</i> , 2010, 2, 1835-1843.	8.0	69
18	Sulfonate-Functionalized, Siloxane-Anchored, Self-Assembled Monolayers. <i>Langmuir</i> , 1995, 11, 2322-2324.	3.5	67

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19	In Situ Attenuated Total Reflectance Fourier Transform Infrared Spectroscopy Study of Carboxylate-Bearing, Siloxane-Anchored, Self-Assembled Monolayers: A Study of Carboxylate Reactivity and Acid-Base Properties. <i>Langmuir</i> , 1995, 11, 1190-1195.	3.5	52
20	Liquid Phase Deposition of a Space-Durable, Antistatic SnO <sub>2</sub> Coating on Kapton. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 3539-3546.	8.0	50
21	Electrophilic siloxane-based self-assembled monolayers for thiol-mediated anchoring of peptides and proteins. <i>Langmuir</i> , 1993, 9, 3009-3014.	3.5	49
22	Molecular Monolayer-Mediated Control over Semiconductor Surfaces: Evidence for Molecular Depolarization of Silane Monolayers on Si/SiO <sub>x</sub> . <i>Journal of the American Chemical Society</i> , 2003, 125, 4730-4731.	13.7	44
23	Solution-Deposited Amorphous Titanium Dioxide on Silicone Rubber: A Conformal, Crack-Free Antibacterial Coating. <i>Chemistry of Materials</i> , 2008, 20, 1390-1396.	6.7	43
24	Detection of triacetone triperoxide (TATP) with an array of sensors based on non-specific interactions. <i>Sensors and Actuators B: Chemical</i> , 2009, 140, 122-127.	7.8	41
25	Siloxane-anchored thin films on silicon dioxide-modified stainless steel. <i>Thin Solid Films</i> , 2003, 425, 49-58.	1.8	39
26	Effect of Molecule-Molecule Interaction on the Electronic Properties of Molecularly Modified Si/SiO <sub>x</sub> Surfaces. <i>Journal of Physical Chemistry B</i> , 2004, 108, 664-672.	2.6	39
27	Development of ion-sensitive field-effect transistor-based sensors for benzylphosphonic acids and thiophenols using molecularly imprinted TiO <sub>2</sub> films. <i>Analytica Chimica Acta</i> , 2004, 504, 113-122.	5.4	37
28	Enhancement of a chemical reaction rate by proper orientation of reacting molecules in the solid state. <i>Journal of the American Chemical Society</i> , 1975, 97, 5290-5291.	13.7	36
29	In situ observation of monolayer self-assembly by FTIR/ATR. <i>Journal of the American Chemical Society</i> , 1992, 114, 5436-5437.	13.7	34
30	Monitoring the Evaporation of Fluids from Fiber-Optic Micro-Cell Cavities. <i>Sensors</i> , 2013, 13, 15261-15273.	3.8	33
31	Odd-Even Effect in Molecular Electronic Transport via an Aromatic Ring. <i>Langmuir</i> , 2014, 30, 13596-13605.	3.5	33
32	Functionalized Silanes for the Preparation of Siloxane-Anchored Monolayers. <i>Langmuir</i> , 2000, 16, 247-251.	3.5	31
33	Hydroxymercuration of non-conjugated dienes in aqueous micelles. <i>Journal of the American Chemical Society</i> , 1980, 102, 7798-7799.	13.7	30
34	The reduction of oximes by lithium aluminum hydride in hexamethylphosphoramide solvent. <i>Journal of Organic Chemistry</i> , 1985, 50, 5448-5450.	3.2	30
35	Problems and approaches in covalent attachment of peptides and proteins to inorganic surfaces for biosensor applications. <i>Journal of Industrial Microbiology</i> , 1994, 13, 137-143.	0.9	29
36	Photocontrolled Formation of Hydroxyl-Bearing Monolayers and Multilayers. <i>Langmuir</i> , 1996, 12, 5509-5511.	3.5	28

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37	Cell type-specific modulation of fibronectin adhesion functions on chemically-derivatized self-assembled monolayers. <i>Journal of Biomaterials Science, Polymer Edition</i> , 1998, 9, 1161-1176.	3.5	28
38	Tailoring the Surface of NiTi Alloy Using PIRAC Nitriding Followed by Anodization and Phosphonate Monolayer Deposition. <i>Chemistry of Materials</i> , 2008, 20, 5368-5374.	6.7	28
39	Functionalized siloxy-anchored monolayers with exposed amino, azido, bromo, or cyano groups. <i>Tetrahedron Letters</i> , 1988, 29, 5593-5594.	1.4	27
40	Controlled fabrication of silver or gold nanoparticle near-field optical atomic force probes: Enhancement of second-harmonic generation. <i>Applied Physics Letters</i> , 2002, 81, 3461-3463.	3.3	27
41	Synthesis, characterization, and chemistry of bridgehead-functionalized bicyclo[2.2.2]octanes: reactions at neopentyl sites. <i>Journal of Organic Chemistry</i> , 1984, 49, 665-670.	3.2	25
42	Micellar control of organic reactions: propellane substrates as stereochemical probes for micellar binding. <i>Journal of the American Chemical Society</i> , 1987, 109, 7477-7483.	13.7	25
43	Pyrolysis of self-assembled organic monolayers on oxide substrates. <i>Journal of Materials Research</i> , 1999, 14, 2116-2123.	2.6	23
44	In Situ Quartz Crystal Microgravimetric Studies of Molecular Adsorbates Containing Thiol and Hydroquinone Moieties Bound to Au(111) Surfaces in Aqueous Electrolytes. <i>Langmuir</i> , 1995, 11, 4626-4628.	3.5	22
45	Titania Deposition on PMR-15. <i>Chemistry of Materials</i> , 2005, 17, 3205-3213.	6.7	22
46	Activated anhydrides of tartaric and malic acids. <i>Journal of Organic Chemistry</i> , 1987, 52, 455-457.	3.2	21
47	Interfacial chemistry on carboxylate-functionalized monolayer assemblies. <i>Israel Journal of Chemistry</i> , 2005, 45, 321-336.	2.3	21
48	Modification of a polypropylene feed spacer with metal oxide-thin film by chemical bath deposition for biofouling control in membrane filtration. <i>Journal of Membrane Science</i> , 2019, 573, 511-519.	8.2	21
49	Monitoring and analysis of pendant droplets evaporation using bare and monolayer-coated optical fiber facets. <i>Optical Materials Express</i> , 2014, 4, 903.	3.0	20
50	Deposition of Compact Hydrous Aluminum Sulfate Thin Films on Titania Particles Coated with Organic Self-Assembled Monolayers. <i>Chemistry of Materials</i> , 1998, 10, 2135-2144.	6.7	19
51	Controlled Deposition of Gold Nanowires on Semiconducting and Nonconducting Surfaces. <i>Nano Letters</i> , 2007, 7, 1883-1887.	9.1	19
52	Corrosion studies of stainless steel protected by a TiO <sub>2</sub> thin film deposited on a sulfonate-functionalized self-assembled monolayer. <i>Corrosion Science</i> , 2010, 52, 125-129.	6.6	18
53	Structure of Carboxyl-Acid-Terminated Self-Assembled Monolayers from Molecular Dynamics Simulations and Hybrid Quantum Mechanics/Molecular Mechanics Vibrational Normal-Mode Analysis. <i>Journal of Physical Chemistry C</i> , 2012, 116, 770-782.	3.1	18
54	Biofilm prevention on cochlear implants. <i>Cochlear Implants International</i> , 2014, 15, 173-178.	1.2	18

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55	Effect of surfactant micelles on the stereochemistry and rate of "amsylate" solvolytic displacement reactions in water. <i>Journal of the American Chemical Society</i> , 1976, 98, 6613-6623.	13.7	17
56	Phosphonate-Anchored Monolayers for Antibody Binding to Magnetic Nanoparticles. <i>Langmuir</i> , 2011, 27, 12082-12089.	3.5	17
57	Ceramic Coatings for Fiber Matrix Composites: Titania Thin Films on Bismaleimide-glass Fiber Composites. <i>Journal of Materials Research</i> , 2005, 20, 2544-2552.	2.6	16
58	Micellar perturbation of enone reduction. <i>Tetrahedron Letters</i> , 1982, 23, 4211-4214.	1.4	15
59	Micelle-mediated organic synthesis: the synthesis and characterization of three new polycyclic dioxo cage compounds. <i>Journal of Organic Chemistry</i> , 1984, 49, 1295-1297.	3.2	15
60	Controlled Formation of Thiol and Disulfide Interfaces. <i>Langmuir</i> , 2013, 29, 191-198.	3.5	15
61	Effect of micelles on the rate and stereochemistry of solvolytic displacement reactions. <i>Journal of the American Chemical Society</i> , 1975, 97, 445-447.	13.7	14
62	Atomic-force-controlled capillary electrophoretic nanoprinting of proteins. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 396, 133-138.	3.7	14
63	Siloxane-based thin films for corrosion protection of stainless steel in chloride media. <i>Journal of Applied Electrochemistry</i> , 2011, 41, 885-890.	2.9	14
64	Micelle-based nucleophile selectivity: alkoxymercuration in aqueous sodium dodecyl sulfate. <i>Journal of Organic Chemistry</i> , 1987, 52, 5039-5041.	3.2	13
65	Ozonolysis-Based Route to the In Situ Formation of Aldehyde-Bearing Self-Assembled Monolayer Surfaces. <i>Langmuir</i> , 2008, 24, 2545-2552.	3.5	13
66	Competitive carbon-oxygen cleavage, sulfur-oxygen cleavage, and electron transfer in the lithium aluminum hydride reduction of hindered disulfonates. <i>Journal of Organic Chemistry</i> , 1985, 50, 653-656.	3.2	12
67	Charging effects in the ion beam analysis of insulating polymers. <i>Polymer</i> , 2015, 72, 59-62.	3.8	12
68	Highly Doped Silicon Electrodes for the Electrochemical Modification of Self-Assembled Siloxane-Anchored Monolayers: A Feasibility Study. <i>Langmuir</i> , 2001, 17, 1608-1619.	3.5	11
69	Phosphonate-anchored thin films on titanium and niobium oxide surfaces: Fabrication and characterization. <i>Thin Solid Films</i> , 2010, 518, 1966-1972.	1.8	10
70	Variations in the structure and reactivity of thioester functionalized self-assembled monolayers and their use for controlled surface modification. <i>Beilstein Journal of Nanotechnology</i> , 2012, 3, 213-220.	2.8	10
71	Carboxylic Acid Decorated Self-Assembled Monolayer Films: New Acid Synthesis Chemistry and Reaction Chemistry Including Bridged Diacyl Peroxide Preparation. <i>Langmuir</i> , 2015, 31, 3049-3058.	3.5	10
72	The reaction of LiAlH <sub>4</sub> /HMPA with oximes: Mechanism and synthetic applications. <i>Tetrahedron Letters</i> , 1986, 27, 4849-4852.	1.4	9

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73	The Effect of Nanoparticle Size on Cellular Binding Probability. <i>Journal of Atomic, Molecular, and Optical Physics</i> , 2012, 2012, 1-7.	0.5	9
74	Reduction of [m.3.3]propellane ketones in solution aggregates. <i>Journal of Organic Chemistry</i> , 1988, 53, 3559-3563.	3.2	8
75	Conformations of [m.3.3]propellane ketones and alcohols. <i>Journal of Organic Chemistry</i> , 1990, 55, 2164-2169.	3.2	8
76	Benzonorbornadiene end caps for PMR resins. <i>Macromolecules</i> , 1992, 25, 530-534.	4.8	8
77	Lower temperature curing thermoset polyimides utilizing a substituted norbornene endcap. <i>Macromolecules</i> , 1992, 25, 3868-3873.	4.8	8
78	Effect of $\hat{\pm}$ -Heteroatoms on the Formation of Alkene-Derived Monolayers on $\text{H}\hat{\epsilon}\text{Si}(111)$ : A Combined Experimental and Theoretical Study. <i>Langmuir</i> , 2015, 31, 8318-8327.	3.5	8
79	Effect of binding group on hybridization across the silicon/aromatic-monolayer interface. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2015, 204, 149-158.	1.7	8
80	Effect of Internal Heteroatoms on Level Alignment at Metal/Molecular Monolayer/Si Interfaces. <i>Journal of Physical Chemistry C</i> , 2018, 122, 3312-3325.	3.1	7
81	Microfluidic Devices Containing ZnO Nanorods with Tunable Surface Chemistry and Wetting-Independent Water Mobility. <i>Langmuir</i> , 2019, 35, 3265-3271.	3.5	7
82	Preparation and characterization of lead lanthanum zirconate titanate (PLZT) thin films using an organic self-assembled monolayer template. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2001, 87, 87-91.	3.5	6
83	<i>In Situ</i> Sulfonation of Alkyl Benzene Self-Assembled Monolayers: Product Distribution and Kinetic Analysis. <i>Langmuir</i> , 2008, 24, 10910-10919.	3.5	6
84	Oxide Surfaces with Tunable Stiffness. <i>Journal of Physical Chemistry C</i> , 2013, 117, 22232-22239.	3.1	6
85	A nanometric cushion for enhancing scratch and wear resistance of hard films. <i>Beilstein Journal of Nanotechnology</i> , 2014, 5, 1005-1015.	2.8	6
86	An off-the-shelf integrated microfluidic device comprising self-assembled monolayers for protein array experiments. <i>Biomicrofluidics</i> , 2015, 9, 054108.	2.4	5
87	Highly loaded COOH functionalized silica particles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 504, 242-251.	4.7	5
88	Chemical applications of near-field scanning optical microscopy: Surface and near-surface chemical imaging with conventional near-field optical probes and externally illuminated chemically active ion sensors. <i>Israel Journal of Chemistry</i> , 2001, 41, 129-138.	2.3	3
89	Surface immobilization of an organo-iridium complex through a carbon-metal bond. <i>Inorganica Chimica Acta</i> , 2011, 375, 305-307.	2.4	3
90	Functionalized Self-Assembled Monolayers Bearing Diiminate Complexes Immobilized through Covalently Anchored Ligands. <i>Langmuir</i> , 2018, 34, 13472-13480.	3.5	1

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91	Reply to Comment on Highly Doped Silicon Electrodes for the Electrochemical Modification of Self-Assembled Siloxane-Anchored Monolayers: A Feasibility Study. Langmuir, 2002, 18, 960-960.	3.5	0