Malcolm F Kadodwala

List of Publications by Year
in descending order

64 papers	2,822 citations	257450 24 h-index	175258 52 g-index
65 all docs	65 docs citations	65 times ranked	2800 citing authors

#	Article	IF	Citations
1	Ultrasensitive detection and characterization of biomolecules using superchiral fields. Nature Nanotechnology, 2010, 5, 783-787.	31.5	976
2	Induced Chirality through Electromagnetic Coupling between Chiral Molecular Layers and Plasmonic Nanostructures. Nano Letters, 2012, 12, 977-983.	9.1	204
3	â€œSuperchiralâ€•Spectroscopy: Detection of Protein Higher Order Hierarchical Structure with Chiral Plasmonic Nanostructures. Journal of the American Chemical Society, 2015, 137, 8380-8383.	13.7	171
4	Chiral Electromagnetic Fields Generated by Arrays of Nanoslits. Nano Letters, 2012, 12, 3640-3644.	9.1	163
5	Reversible electron-transfer reactions within a nanoscale metal oxide cage mediated by metallic substrates. Nature Nanotechnology, 2008, 3, 229-233.	31.5	96
6	Disposable Plasmonics: Plastic Templated Plasmonic Metamaterials with Tunable Chirality. Advanced Materials, 2015, 27, 5610-5616.	21.0	92
7	Chiral Plasmonic Fields Probe Structural Order of Biointerfaces. Journal of the American Chemical Society, 2018, 140, 8509-8517.	13.7	58
8	Superchiral Plasmonic Phase Sensitivity for Fingerprinting of Protein Interface Structure. ACS Nano, 2017, 11, 12049-12056.	14.6	56
9	Biomacromolecular Stereostructure Mediates Mode Hybridization in Chiral Plasmonic Nanostructures. Nano Letters, 2016, 16, 5806-5814.	9.1	54
10	A Complete Structural Study of the Coverage Dependence of the Bonding of Thiophene on Cu(111). Journal of Physical Chemistry B, 2001, 105, 140-148.	2.6	53
11	The adsorption of methanol on Ag(111) studied with TDS and XPS. Surface Science, 1996, 357-358, 624-628.	1.9	47
12	A structural study of formate on Cu(111). Surface Science, 2000, 444, 52-60.	1.9	47
13	Controlling Metamaterial Transparency with Superchiral Fields. ACS Photonics, 2018, 5, 535-543.	6.6	47
14	Structural determination of the (111) -(âˆš3 Ã— âˆš3) 30Â°- surface using the normal incidence X-ray standing wave method. Surface Science, 1995, 324, 122-132.	1.9	43
15	Spatial control of chemical processes on nanostructures through nano-localized water heating. Nature Communications, 2016, 7, 10946.	12.8	39
16	The structure of methanol and methoxy on Cu(111). Surface Science, 2003, 530, 111-119.	1.9	38
17	Bromine adsorption on Cu(111). Surface Science, 1997, 370, L219-L225.	1.9	37
18	Roles of Superchirality and Interference in Chiral Plasmonic Biodetection. Journal of Physical Chemistry C, 2019, 123, 15195-15203.	3.1	32

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19	Superchiral near fields detect virus structure. Light: Science and Applications, 2020, 9, 195.	16.6	32
20	The structure of disordered chemisorbed oxygen on Cu. Surface Science, 2002, 519, 57-63.	1.9	31
21	A NIXSW and NEXAFS investigation of thiophene on Cu(111). Surface Science, 1998, 412-413, 166-173.	1.9	29
22	An unusual adsorption site for methoxy on Al(111) surfaces. Journal of Physics Condensed Matter, 1992, 4, 5043-5052.	1.8	26
23	Large ion yields in hydrogen scattering from a graphite surface. Journal of Applied Physics, 1997, 81, 6390-6396.	2.5	25
24	Tert-butyl nitrite surface photochemistry: The transition from submonolayer to multilayer behavior. Journal of Chemical Physics, 1998, 108, 1688-1701.	3.0	24
25	Highly Efficient Electron Beam Induced Enantioselective Surface Chemistry. Journal of Physical Chemistry C, 2008, 112, 18299-18302.	3.1	21
26	Going Beyond the Physical: Instilling Chirality onto the Electronic Structure of a Metal. Angewandte Chemie - International Edition, 2005, 44, 1830-1833.	13.8	18
27	1â€Bromoâ€2â€chloroethane adsorption on Cu(111). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 2019-2023.	2.1	16
28	A High-Resolution Photoemission Study of Nanoscale Aluminum Oxide Films on NiAl(110). Langmuir, 2005, 21, 8312-8318.	3.5	16
29	The photodissociation of tert-butyl nitrite adsorbed on Ag(111): bimodal velocity distributions of the photoproducts. Chemical Physics Letters, 1997, 268, 7-12.	2.6	15
30	Molecular and dissociative adsorption of 1-bromo-2-chloroethane on Cu(111). Surface Science, 1999, 442, 517-530.	1.9	15
31	The structure of acetate and trifluoroacetate on Cu(111). Surface Science, 2001, 477, 163-173.	1.9	15
32	Photoemission studies of the surface reactivity of thiophene on Si()-(2Ã—1), Si()-(7Ã—7) and Ge()-(2Ã—1). Surface Science, 2001, 494, 251-264.	1.9	15
33	A structural study of disordered sulfur overlayers on Cu(111). Surface Science, 2006, 600, 897-903.	1.9	15
34	Supramolecular Assembly Facilitating Adsorbate-Induced Chiral Electronic States in a Metal Surface. Journal of Physical Chemistry B, 2007, 111, 10005-10011.	2.6	15
35	The Wavelength Dependence oftert-Butyl Nitrite Surface Photochemistry. Journal of Physical Chemistry B, 1998, 102, 8736-8743.	2.6	14
36	A TPD and NIXSW investigation of furan and tetrahydrofuran adsorption on Cu. Surface Science, 2003, 541, 3-13.	1.9	14

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37	Biomacromolecular charge chirality detected using chiral plasmonic nanostructures. Nanoscale Horizons, 2020, 5, 336-344.	8.0	13
38	The structure of a coadsorbed layer of thiophene and CO on Cu(111). Surface Science, 2002, 511, 190-202.	1.9	12
39	The bonding of acetone on Cu(111). Surface Science, 2004, 548, 5-12.	1.9	12
40	Growth and alloying of thin film Te on Cu(111). Surface Science, 2012, 606, 1353-1359.	1.9	12
41	Probing Specificity of Proteinâ€“Protein Interactions with Chiral Plasmonic Nanostructures. Journal of Physical Chemistry Letters, 2019, 10, 6105-6111.	4.6	12
42	The surface structure of 1-bromo-2-chloroethane on Cu(111). Surface Science, 1997, 392, 199-211.	1.9	11
43	Chiral Quantum Metamaterial for Hypersensitive Biomolecule Detection. ACS Nano, 2021, 15, 19905-19916.	14.6	11
44	The adsorption of tert-butyl nitrite on Ag(111). Surface Science, 1998, 402-404, 140-144.	1.9	10
45	The origin of off-resonance non-linear optical activity of a gold chiral nanomaterial. Nanoscale, 2013, 5, 12651-12657.	5.6	10
46	Controlling the symmetry of inorganic ionic nanofilms with optical chirality. Nature Communications, 2020, 11, 5169.	12.8	10
47	Chiral discrimination within disordered adlayers on metal surfaces. Chemical Communications, 2004, , 2492.	4.1	9
48	Lifting the Mirror Symmetry of Metal Surfaces:Â Decoupling the Electronic and Physical Manifestations of Surface Chirality. Journal of Physical Chemistry B, 2006, 110, 1083-1090.	2.6	8
49	The structural analysis of Cu(111)-(<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si18.gif" overflow="scroll"><mml:mfenced open="(" close=")"><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:mfenced></mml:math>×<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si19.gif" overflow="scroll"><mml:mfenced open="(" close=")"><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:mfenced></mml:math>)R30° surface	1.9	8
50	Superchiral hot-spots in â€œrealâ€•chiral plasmonic structures. Materials Advances, 2022, 3, 346-354.	5.4	8
51	An investigation of the surface chemistry of methyl pyruvate on Cu(111). Surface Science, 2007, 601, 5485-5491.	1.9	7
52	Detecting Antibodyâ€“Antigen Interactions with Chiral Plasmons: Factors Influencing Chiral Plasmonic Sensing. Advanced Photonics Research, 2022, 3, 2100155.	3.6	7
53	POSSIBLE "HOT" MOLECULE DESORPTION BY ELECTRON STIMULATED DECOMPOSITION OF DIHALOETHANES ON Cu(111). Surface Review and Letters, 1994, 01, 535-538.	1.1	6
54	Sulfur the Archetypal Catalyst Poison? The Sulfur-Induced Promotion of the Bonding of Unsaturated Hydrocarbons on Cu(111). Journal of Physical Chemistry B, 2006, 110, 21857-21864.	2.6	6

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55	Asymmetric photoelectron transmission through chirally-sculpted, polycrystalline gold. Physical Chemistry Chemical Physics, 2009, 11, 8413.	2.8	6
56	Probing the adsorption structure of a multifunctional organic molecule: a NIXSW and NEXAFS study of 3-chlorothiophene on Cu(111). Surface Science, 1999, 430, 45-54.	1.9	5
57	The electron stimulated chemistry of methyl lactate on Cu(111). Surface Science, 2010, 604, 409-414.	1.9	4
58	Probing the chemical and electronic properties of the coreâ€“shell architecture of transition metal trisulfide nanoribbons. Nanoscale, 2012, 4, 607-612.	5.6	4
59	The templated growth of a chiral transition metal chalcogenide. Surface Science, 2014, 629, 94-101.	1.9	4
60	Active Chiral Plasmonics: Flexoelectric Control of Nanoscale Chirality. Advanced Photonics Research, 2021, 2, 2000062.	3.6	4
61	Effects of Substituents on the Structure and Bonding of Thiophene on Cu(111). Journal of Physical Chemistry B, 2001, 105, 5231-5237.	2.6	3
62	Destabilizing Effects of Thiols on Bonding to a Noble Metal: The Effects of Methanethiolate on the Bonding of Aldehydes and Alcohols on Cu(111). Journal of Physical Chemistry C, 2010, 114, 21457-21464.	3.1	3
63	Symmetry Reduction and Shape Effects in Concave Chiral Plasmonic Structures. Journal of Physical Chemistry C, 2018, 122, 5049-5056.	3.1	3
64	Electron Energy Loss Spectroscopy of a Chiral Plasmonic Structure. Journal of Physics: Conference Series, 2015, 644, 012005.	0.4	2