

CITATION REPORT

List of articles citing

Correlation between bonding geometry and band gap states at organic-inorganic interfaces: catechol on rutile TiO₂(110)

DOI: 10.1021/ja803595u

Journal of the American Chemical Society, 2009, 131, 980-4.

Source: <https://exaly.com/paper-pdf/46621008/citation-report.pdf>

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
166	McMurry chemistry on TiO ₂ (110): Reductive C=C coupling of benzaldehyde driven by titanium interstitials. <i>Journal of the American Chemical Society</i> , 2009 , 131, 15026-31	16.4	42
165	X-ray absorption spectroscopy of biomimetic dye molecules for solar cells. 2009 , 131, 194701		48
164	Direction-dependent intermolecular interactions: catechol on TiO ₂ (110)-111. 2009 ,		
163	Self-energy and excitonic effects in the electronic and optical properties of TiO ₂ crystalline phases. 2010 , 82,		212
162	Electrophoretic deposition of TiO ₂ and composite TiO ₂ -MnO ₂ films using benzoic acid and phenolic molecules as charging additives. 2010 , 352, 371-8		53
161	Energy level alignment of catechol molecular orbitals on ZnO(1 1 200) and TiO ₂ (1 1 0) surfaces. <i>Applied Surface Science</i> , 2010 , 256, 4829-4833	6.7	19
160	Titanium(IV) complexes as direct TiO ₂ photosensitizers. 2010 , 254, 2687-2701		153
159	Hydrogen bonding controls the dynamics of catechol adsorbed on a TiO ₂ (110) surface. 2010 , 328, 882-4		193
158	Fabricating chemical gradients on oxide surfaces by means of fluorinated, catechol-based, self-assembled monolayers. <i>Langmuir</i> , 2010 , 26, 16211-20	4	71
157	New Type II Catechol-Thiophene Sensitizers for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 17964-17974	3.8	73
156	Fabrication and growth mechanism of three-dimensional spherical TiO ₂ architectures consisting of TiO ₂ nanorods with {110} exposed facets. <i>Nanoscale</i> , 2010 , 2, 2109-13	7.7	13
155	Controllable Modulation of the Electronic Structure of ZnO(101 0) Surface by Carboxylic Acids. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 3973-3980	3.8	26
154	Surface Assembly of Catechol-Functionalized Poly(L-lysine)-graft-poly(ethylene glycol) Copolymer on Titanium Exploiting Combined Electrostatically Driven Self-Organization and Biomimetic Strong Adhesion. 2010 , 43, 1050-1060		90
153	Reactivity of TiO ₂ rutile and anatase surfaces toward nitroaromatics. <i>Journal of the American Chemical Society</i> , 2010 , 132, 64-6	16.4	89
152	Poly(ethylene glycol) adlayers immobilized to metal oxide substrates through catechol derivatives: influence of assembly conditions on formation and stability. <i>Langmuir</i> , 2010 , 26, 4018-26	4	109
151	Dopamine adsorption on anatase TiO ₂ (101): a photoemission and NEXAFS spectroscopy study. <i>Langmuir</i> , 2010 , 26, 14548-55	4	74
150	Nanotubes from Rutile TiO ₂ (110) Sheets: Formation and Properties. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 9251-9256	3.8	19

149	A shortcut for evaluating activities of TiO ₂ facets: water dissociative chemisorption on TiO ₂ -B (100) and (001). <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 8721-7	3.6	33
148	Adsorption of Catechol on TiO ₂ Rutile (100): A Density Functional Theory Investigation. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 6491-6495	3.8	34
147	Study of Interfacial Charge Transfer Bands and Electron Recombination in the Surface Complexes of TCNE, TCNQ, and TCNAQ with TiO ₂ . <i>Journal of Physical Chemistry C</i> , 2011 , 115, 21487-21493	3.8	69
146	Adsorption and surface complexation study of L-DOPA on Rutile (TiO ₂) in NaCl solutions. 2011 , 45, 3959-66		45
145	Self-assembly of focal point oligo-catechol ethylene glycol dendrons on titanium oxide surfaces: adsorption kinetics, surface characterization, and nonfouling properties. <i>Journal of the American Chemical Society</i> , 2011 , 133, 10940-50	16.4	166
144	Molecular imaging of reductive coupling reactions: interstitial-mediated coupling of benzaldehyde on reduced TiO ₂ (110). 2011 , 5, 834-43		33
143	Electronic structure and optical spectra of catechol on TiO ₂ nanoparticles from real time TD-DFT simulations. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 1506-14	3.6	90
142	Anchor group versus conjugation: toward the gap-state engineering of functionalized ZnO(1010) surface for optoelectronic applications. <i>Journal of the American Chemical Society</i> , 2011 , 133, 5893-9	16.4	96
141	Interfacial morphology and photoelectrochemistry of conjugated polyelectrolytes adsorbed on single crystal TiO ₂ . <i>Langmuir</i> , 2011 , 27, 11906-16	4	11
140	Adsorption-site-dependent electronic structure of catechol on the anatase TiO ₂ (101) surface. <i>Langmuir</i> , 2011 , 27, 8600-4	4	36
139	Theoretical Study of the Surface Complex between TiO ₂ and TCNQ Showing Interfacial Charge-Transfer Transitions. 2011 , 2, 1167-70		81
138	High-Throughput Computational Screening of Chromophores for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 11781-11792	3.8	110
137	Growth and organization of an organic molecular monolayer on TiO ₂ : catechol on anatase (101). <i>Journal of the American Chemical Society</i> , 2011 , 133, 7816-23	16.4	93
136	Characterization of noninnocent metal complexes using solid-state NMR spectroscopy: o-dioxolene vanadium complexes. 2011 , 50, 9794-803		39
135	Effect of hydration of the TiO ₂ anatase (101) substrate on the atomic layer deposition of alumina films. 2011 , 21, 4197		14
134	Electronic structure of dye-sensitized TiO ₂ clusters from many-body perturbation theory. 2011 , 84,		38
133	Theoretical studies of dye-sensitized solar cells: from electronic structure to elementary processes. 2011 , 4, 4473		173
132	First-principles investigations of electronic and magnetic properties of SrTiO ₃ (001) surfaces with adsorbed ethanol and acetone molecules. 2011 , 83,		15

131	Bioinspired catecholic chemistry for surface modification. 2011 , 40, 4244-58		935
130	Nanoparticles with logic and numeracy: towards computer-on-a-particle optoelectronic devices. 2011 , 5, 103		6
129	Water splitting on TiO ₂ nanotube arrays. 2011 , 165, 145-149		40
128	A model for recombination in Type II dye-sensitized solar cells: Catechol-phenylene dyes. <i>Chemical Physics Letters</i> , 2011 , 504, 230-235	2.5	29
127	Unoccupied states in Cu and Zn octaethyl-porphyrin and phthalocyanine. 2011 , 134, 204707		28
126	Two decades of studying non-covalent biomolecular assemblies by means of electrospray ionization mass spectrometry. 2012 , 9, 801-16		113
125	Adsorbate-Induced Modification of Surface Electronic Structure: Pyrocatechol Adsorption on the Anatase TiO ₂ (101) and Rutile TiO ₂ (110) Surfaces. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 23515-23525	3.8	44
124	Self-assembly of alkylcatechols on HOPG investigated by scanning tunneling microscopy and molecular dynamics simulations. 2012 , 14, 264-271		16
123	Porphyrins in bio-inspired transformations: Light-harvesting to solar cell. 2012 , 256, 2601-2627		219
122	Self-assembly of a catechol-based macrocycle at the liquid-solid interface: experiments and molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 11937-43	3.6	13
121	Surface Effects on Catechol/Semiconductor Interfaces. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 17158-17163	1.9	19
120	Dynamic adsorption of catechol at the goethite/aqueous solution interface: a molecular-scale study. <i>Langmuir</i> , 2012 , 28, 14588-97	4	50
119	Adsorption Geometry of CO versus Coverage on TiO ₂ (110) from s- and p-Polarized Infrared Spectroscopy. 2012 , 3, 3425-30		38
118	Isotopic Substitution as a Strategy to Control Non-Adiabatic Dynamics in Photoelectrochemical Cells: Surface Complexes between TiO ₂ and Dicyanomethylene Compounds. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 10NE03	1.4	4
117	OH Group Dynamics of 1,3-Propanediol on TiO ₂ (110). 2012 , 3, 3257-3263		15
116	Pyrocatechol as a surface capping molecule on rutile TiO ₂ (110). <i>Surface Science</i> , 2012 , 606, 273-277	1.8	8
115	Catecholate and 2,3-acenediolate complexes of d ₀ ions as prospective materials for molecular electronics and spintronics. 2012 , 256, 1706-1731		20
114	Surface modification of anatase nanoparticles with fused ring catecholate type ligands: a combined DFT and experimental study of optical properties. <i>Nanoscale</i> , 2012 , 4, 1612-9	7.7	48

113	Coating TiO ₂ Anatase by Amorphous Al ₂ O ₃ : Effects on Dyes Anchoring Through Carboxyl Groups. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 4408-4415	3.8	8
112	Speciation of L-DOPA on nanorutile as a function of pH and surface coverage using surface-enhanced Raman spectroscopy (SERS). <i>Langmuir</i> , 2012 , 28, 17322-30	4	27
111	PEM anchorage on titanium using catechol grafting. 2012 , 7, e50326		3
110	Theoretical study of the reduction of uranium(VI) aquo complexes on titania particles and by alcohols. <i>Chemistry - A European Journal</i> , 2012 , 18, 7117-27	4.8	23
109	Photophysical and electrochemical properties, and molecular structures of organic dyes for dye-sensitized solar cells. 2012 , 13, 4032-80		282
108	Adsorption of organic molecules on rutile TiO ₂ and anatase TiO ₂ single crystal surfaces. 2012 , 41, 4207-17		197
107	Bio-inspired catechol chemistry for electrophoretic nanotechnology of oxide films. 2012 , 380, 8-15		16
106	Switchable self-assembly of a bioinspired alkyl catechol at a solid/liquid interface: competitive interfacial, noncovalent, and solvent interactions. <i>Chemistry - A European Journal</i> , 2012 , 18, 3056-63	4.8	27
105	Level alignment of a prototypical photocatalytic system: methanol on TiO ₂ (110). <i>Journal of the American Chemical Society</i> , 2013 , 135, 11429-32	16.4	64
104	TDDFT studies of electronic spectra and excited states of the triphenylamine-based organic sensitizers and organic sensitizer-titanium dioxide cluster complexes. <i>RSC Advances</i> , 2013 , 3, 12133	3.7	11
103	Conversion of Guaiacol over Supported Ru Catalysts. 2013 , 143, 783-791		92
102	Combined Surface Science and DFT Study of the Adsorption of Dinitrotoluene (2,4-DNT) on Rutile TiO ₂ (110): Molecular Scale Insight into Sensing of Explosives. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 16468-16476	3.8	10
101	Surface modification of anatase nanoparticles with fused ring salicylate-type ligands (3-hydroxy-2-naphthoic acids): a combined DFT and experimental study of optical properties. <i>Nanoscale</i> , 2013 , 5, 7601-12	7.7	36
100	The origin of the strong interfacial charge-transfer absorption in the surface complex between TiO ₂ and dicyanomethylene compounds. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 18584-8	3.6	23
99	Mussel inspired surface functionalization of electrospun nanofibers for bio-applications. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 17029-37	3.6	35
98	Naphthalene derivatized TiO ₂ -carbon hybrid materials for efficient photocatalytic splitting of water. 2013 , 199, 8-14		27
97	Catechol-based biomimetic functional materials. <i>Advanced Materials</i> , 2013 , 25, 653-701	24	548
96	A quantum-mechanical study of the adsorption of prototype dye molecules on rutile-TiO ₂ (110): a comparison between catechol and isonicotinic acid. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 235-43 ^{3.6}		15

95	Molecular surface chemistry in marine bioadhesion. 2013 , 195-196, 1-18		58
94	The role of surface defect sites of titania nanoparticles in the photocatalysis: Aging and modification. <i>Applied Catalysis B: Environmental</i> , 2013 , 138-139, 122-127	21.8	26
93	Multi-shell structured fluorescent-magnetic nanoprobe for target cell imaging and on-chip sorting. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 7417-24	9.5	30
92	Structure of clean and adsorbate-covered single-crystal rutile TiO ₂ surfaces. <i>Chemical Reviews</i> , 2013 , 113, 3887-948	68.1	257
91	Vibrational spectroscopic studies on pure and metal-covered metal oxide surfaces. 2013 , 250, 1204-1221		18
90	Catechol-Based Biomimetic Functional Materials and their Applications. 2014 , 277-308		
89	GEOMETRY OF DOPAMINE ADSORPTION ON RUTILE (110) SURFACE. 2014 , 28, 1450071		4
88	Visible light driven photocatalysis mediated via ligand-to-metal charge transfer (LMCT): an alternative approach to solar activation of titania. 2014 , 7, 954		293
87	Performance of dye-sensitized solar cells based on various sensitizers applied on TiO ₂ -Nb ₂ O ₅ core/shell photoanode structure. 2014 , 18, 1601-1609		7
86	A review of new methods of surface chemical modification, dispersion and electrophoretic deposition of metal oxide particles. <i>RSC Advances</i> , 2014 , 4, 22716	3.7	132
85	Covalent surface modification of oxide surfaces. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 6322-56	16.4	555
84	Kovalente Oberflächenmodifikationen von Oxiden. <i>Angewandte Chemie</i> , 2014 , 126, 6438-6474	3.6	45
83	Development of DπA fluorescent dyes with a catechol group for dye-sensitized solar cells based on dye-to-TiO ₂ charge transfer. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 8500	13	36
82	Adsorption studies of p-aminobenzoic acid on the anatase TiO ₂ (101) surface. <i>Langmuir</i> , 2014 , 30, 12306-14		46
81	The effect of substituents on the surface modification of anatase nanoparticles with catecholate-type ligands: a combined DFT and experimental study. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 20796-805	3.6	41
80	Adsorption of dopamine on rutile TiO ₂ (110): a photoemission and near-edge X-ray absorption fine structure study. <i>Langmuir</i> , 2014 , 30, 8761-9	4	16
79	Nitrocatechol/ZnO Interface: The Role of Dipole in a Dye/Metal-Oxide Model System. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 3910-3917	3.8	9
78	Electronic and optical properties of dye-sensitized TiO ₂ interfaces. 2014 , 347, 1-45		16

77	Adsorption of thioether molecules on an alumina thin film. <i>Surface Science</i> , 2014 , 628, 111-115	1.8	8
76	Theoretical Study of Surface Complexes between TiO ₂ and HeteroTCNQs Showing Interfacial Charge-Transfer Transitions Designed Based on Redox Potential. 2015 , 88, 1410-1416		1
75	Effect of Substituents in Catechol Dye Sensitizers on Photovoltaic Performance of Type II Dye-Sensitized Solar Cells. 2015 , 16, 3049-57		18
74	Catechol and HCl Adsorption on TiO ₂ (110) in Vacuum and at the Water-TiO ₂ Interface. 2015 , 6, 2277-81		25
73	Density functional theory and experimental studies of caffeic acid adsorption on zinc oxide and titanium dioxide nanoparticles. <i>RSC Advances</i> , 2015 , 5, 106877-106885	3.7	39
72	Anatase nanoparticles surface modified with fused ring salicylate-type ligands (1-hydroxy-2-naphthoic acids): A combined DFT and experimental study. 2015 , 630, 226-235		23
71	Using G0W0 Level Alignment to Identify Catechol Structure on TiO ₂ (110). <i>Journal of Physical Chemistry C</i> , 2015 , 119, 19634-19641	3.8	11
70	Unique adsorption behaviors of carboxylic acids at rutile TiO ₂ (110). <i>Surface Science</i> , 2015 , 641, 82-90	1.8	16
69	Electronic signatures of a model pollutant-particle system: chemisorbed phenol on TiO ₂ (110). <i>Langmuir</i> , 2015 , 31, 3869-75	4	13
68	Benzoic Acid and Phthalic Acid on Atomically Well-Defined MgO(100) Thin Films: Adsorption, Interface Reaction, and Thin Film Growth. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 26968-26979	3.8	21
67	Materials from Mussel-Inspired Chemistry for Cell and Tissue Engineering Applications. 2015 , 16, 2541-55		206
66	Co-Adsorbent Effect on the Sensitization of TiO ₂ and ZnO Surfaces: A Theoretical Study. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 27348-27353	3.8	11
65	Theoretical studies of electronic and optical properties of the triphenylamine-based organic dyes with diketopyrrolopyrrole chromophore. <i>Dyes and Pigments</i> , 2015 , 113, 87-95	4.6	41
64	Visible light induced photocatalytic inactivation of bacteria by modified titanium dioxide films on organic polymers. <i>Photochemical and Photobiological Sciences</i> , 2015 , 14, 514-9	4.2	25
63	Adsorption and Light Absorption Properties of 2-Anthroic Acid on Titania: a Density Functional Theory Time-Dependent Density Functional Theory Study. <i>MRS Advances</i> , 2016 , 1, 2795-2800	0.7	
62	An Underwater Surface-Drying Peptide Inspired by a Mussel Adhesive Protein. <i>Advanced Functional Materials</i> , 2016 , 26, 3496-3507	15.6	125
61	Structure-Dependent Anchoring of Organic Molecules to Atomically Defined Oxide Surfaces: Phthalic Acid on Co ₃ O ₄ (111), CoO(100), and CoO(111). <i>Chemistry - A European Journal</i> , 2016 , 22, 5384-96	4.8	20
60	Optical Absorption Spectra and Excitons of Dye-Substrate Interfaces: Catechol on TiO ₂ (110). <i>Journal of Chemical Theory and Computation</i> , 2016 , 12, 2843-52	6.4	27

59	Self-Sensitized Photocatalytic Degradation of Colorless Organic Pollutants Attached to Rutile Nanorods: Experimental and Theoretical DFT+D Studies. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 5442-5456	3.8	41
58	Photoactivity of Molecule-TiO ₂ Clusters with Time-Dependent Density-Functional Theory. <i>Journal of Physical Chemistry A</i> , 2016 , 120, 5115-24	2.8	22
57	The surface structure matters: thermal stability of phthalic acid anchored to atomically-defined cobalt oxide films. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 10419-27	3.6	27
56	Direct Evidence of Chelated Geometry of Catechol on TiO ₂ by a Combined Solid-State NMR and DFT Study. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 23625-23630	3.8	41
55	Molecularly Smooth Self-Assembled Monolayer for High-Mobility Organic Field-Effect Transistors. <i>Nano Letters</i> , 2016 , 16, 6709-6715	11.5	24
54	Computational study of interfacial charge transfer complexes of 2-anthroic acid adsorbed on a titania nanocluster for direct injection solar cells. <i>Chemical Physics Letters</i> , 2016 , 660, 69-75	2.5	20
53	Formation of a thermally stable bilayer of coadsorbed intact and deprotonated thymine exploiting the surface corrugation of rutile TiO ₂ (110). <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 20433-42	3.6	4
52	Effect of caffeic acid adsorption in controlling the morphology of gold nanoparticles: role of surface coverage and functional groups. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 27775-27783	3.6	18
51	Development of type-I/type-II hybrid dye sensitizer with both pyridyl group and catechol unit as anchoring group for type-I/type-II dye-sensitized solar cell. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 30662-30676	3.6	20
50	Quinone and its derivatives for energy harvesting and storage materials. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 11179-11202	13	154
49	An Experimental Investigation of the Adsorption of a Phosphonic Acid on the Anatase TiO ₂ (101) Surface. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 1693-1700	3.8	44
48	Comparative density functional theory and density functional tight binding study of 2-anthroic acid on TiO ₂ . <i>Chemical Physics Letters</i> , 2016 , 643, 16-20	2.5	11
47	Interfacial charge transfer in a functionalized polyoxotitanate cluster. <i>Inorganica Chimica Acta</i> , 2016 , 443, 279-283	2.7	13
46	Multimodal underwater adsorption of oxide nanoparticles on catechol-based polymer nanosheets. <i>Nanoscale</i> , 2016 , 8, 5912-9	7.7	21
45	Effects of Thermal Fluctuations on the Structure, Level Alignment, and Absorption Spectrum of Dye-Sensitized TiO ₂ : A Comparative Study of Catechol and Isonicotinic Acid on the Anatase (101) and Rutile (110) Surfaces. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 3899-3905	3.8	10
44	Fabrication and analysis of dye-sensitized solar cells (DSSCs) using porphyrin dyes with catechol anchoring groups. <i>RSC Advances</i> , 2016 , 6, 14512-14521	3.7	32
43	Periodic DFT Study of Rutile IrO ₂ : Surface Reactivity and Catechol Adsorption. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 13135-13143	3.8	24
42	Electron-Scavenging Chemistry of Benzoquinone on TiO ₂ (110). <i>Topics in Catalysis</i> , 2017 , 60, 440-445	2.3	6

41	Theoretical study of new potential semiconductor surfaces performance for dye sensitized solar cell usage: TiO ₂ -B (001), (100) and H ₂ Ti ₃ O ₇ (100). <i>Applied Surface Science</i> , 2017 , 426, 1182-1189	6.7	16
40	Photovoltaic performances of type-II dye-sensitized solar cells based on catechol dye sensitizers: retardation of back-electron transfer by PET (photo-induced electron transfer). <i>Materials Chemistry Frontiers</i> , 2017 , 1, 2243-2255	7.8	14
39	DFT-based Theoretical Simulations for Photocatalytic Applications Using TiO ₂ . 2017 ,		3
38	The adsorptions of fixed groups CN , NH_2 , BH , OH and COOH of dye molecules on stoichiometric, oxygen vacancy and Pt-doped SnO ₂ (110) surfaces. <i>Applied Surface Science</i> , 2018 , 428, 851-860	6.7	12
37	Carboxylic Acid Group-Induced Oxygen Vacancy Migration on an Anatase (101) Surface. <i>Langmuir</i> , 2018 , 34, 546-552	4	4
36	Modulation on Dye/TiO ₂ Bending Energy and Charge Transfer to High Performance Triphenylamine Based Sensitizers in Solar Cells: A DFT Study. 2018 ,		
35	Titanium-oxo clusters functionalized with catecholate-type ligands: modulating the optical properties through charge-transfer transitions. <i>Dalton Transactions</i> , 2018 , 47, 8158-8163	4.3	26
34	Fundamentals of TiO Photocatalysis: Concepts, Mechanisms, and Challenges. <i>Advanced Materials</i> , 2019 , 31, e1901997	24	403
33	Interaction of a tripeptide with titania surfaces: RGD adsorption on rutile TiO ₂ (110) and model dental implant surfaces. <i>Materials Science and Engineering C</i> , 2019 , 105, 110030	8.3	4
32	Single Molecule Photocatalysis on TiO Surfaces. <i>Chemical Reviews</i> , 2019 , 119, 11020-11041	68.1	115
31	Anisotropic Adsorption of 2-Phenylethyl Alcohol on a Rutile (110) Surface. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 29759-29764	3.8	2
30	Die chemischen Grundlagen der Adhäsion von Catechol. <i>Angewandte Chemie</i> , 2019 , 131, 706-725	3.6	22
29	The Chemistry behind Catechol-Based Adhesion. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 696-714	16.4	293
28	Aloe-vera flower shaped rutile TiO ₂ for selective hydrogenation of nitroaromatics under direct sunlight irradiation. <i>Arabian Journal of Chemistry</i> , 2020 , 13, 2171-2182	5.9	5
27	Dye-sensitized solar cells: from synthetic dyes to natural pigments. 2020 , 107-161		9
26	Formation and Antibacterial Performance of Metal-Organic Framework Films via Dopamine-Mediated Fast Assembly under Visible Light. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 15834-15842	8.3	9
25	Adsorption and Motion of Single Molecular Motors on TiO ₂ (110). <i>Journal of Physical Chemistry C</i> , 2020 , 124, 24776-24785	3.8	4
24	Dual roles of [NCN] ²⁻ on anatase TiO ₂ : A fully occupied molecular gap state for direct charge injection into the conduction band and an interfacial mediator for the covalent formation of heterostructured g-C ₃ N ₄ /a-TiO ₂ nanocomposite. <i>Applied Catalysis B: Environmental</i> , 2020 , 273, 119036	21.8	6

23	Polyphenol-Mediated Assembly for Particle Engineering. <i>Accounts of Chemical Research</i> , 2020 , 53, 1269-1278	12.78	94
22	Basic Principle of Photoinduced Charge Separation for TiO ₂ /CNQ Surface Complex Revealed by a Multibody Model. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 13535-13540	3.8	1
21	Effect of molecular weight and polymer composition on gallol-functionalized underwater adhesive. <i>Journal of Materials Chemistry B</i> , 2020 , 8, 6798-6801	7.3	13
20	Surface Functionalization of Ti ₃ C ₂ MXene Nanosheets with Catechols: Implication for Colloidal Processing. <i>Langmuir</i> , 2021 , 37, 5447-5456	4	4
19	Surface modification of BaTiO ₃ with catechol surfactant and effects on cold sintering. <i>Journal of Applied Physics</i> , 2021 , 129, 184102	2.5	2
18	Preliminary Investigation on Vacancy Filling by Small Molecules on the Performance of Dye-Sensitized Solar Cells: The Case of a Type-II Absorber. <i>Frontiers in Chemistry</i> , 2021 , 9, 701781	5	1
17	Role of polydopamine in the enhancement of binding stability of TiO ₂ nanoparticles on polyethersulfone ultrafiltration membrane. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021 , 622, 126694	5.1	3
16	On the Origin of Gap States in Molecular Semiconductors: A Combined UPS, AFM, and X-ray Diffraction Study. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 17929-17938	3.8	0
15	Multifaceted role of phyto-derived polyphenols in nanodrug delivery systems. <i>Advanced Drug Delivery Reviews</i> , 2021 , 176, 113870	18.5	14
14	Surface Functionalization of Metal Oxide Semiconductors with Catechol Ligands for Enhancing Their Photoactivity. <i>Solar Rrl</i> , 2021 , 5, 2100512	7.1	4
13	Doping effects on catechol functionalized anatase TiO ₂ (101) surface for dye-sensitized solar cells. <i>Materials Research Express</i> , 2021 , 8, 015906	1.7	0
12	Isotopic Substitution as a Strategy to Control Non-Adiabatic Dynamics in Photoelectrochemical Cells: Surface Complexes between TiO ₂ and Dicyanomethylene Compounds. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 10NE03	1.4	4
11	Photoelectrochemical IL-6 Immunoassay Manufactured on Multifunctional Catecholate-Modified TiO Scaffolds. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 50851-50861	9.5	2
10	Metal-polyphenol Complexes as Versatile Building Blocks for Functional Biomaterials. <i>Biotechnology and Bioprocess Engineering</i> , 2021 , 26, 689-707	3.1	0
9	Unleashing the shape of L-DOPA at last.. <i>Physical Chemistry Chemical Physics</i> , 2021 ,	3.6	0
8	Dopamine Adsorption on Rutile TiO(110): Geometry, Thermodynamics, and Core-Level Shifts from First Principles.. <i>ACS Omega</i> , 2022 , 7, 4185-4193	3.9	0
7	Hydrogen-bond-stabilized high density catechol monolayer on magnetite Fe ₃ O ₄ (111). <i>Surface Science</i> , 2022 , 719, 122027	1.8	0
6	Insight into the effects of coverage, water, and defects on the properties of the catechol/TiO ₂ interface. <i>Chinese Journal of Chemical Physics</i> ,	0.9	

- 5 Ligand-Promoted Surface Solubilization of TiO₂ Nanoparticles by the Enterobactin Siderophore in Biological Medium. **2022**, 12, 1516 ○
- 4 Adsorption structures of catechol on the ZnO(10-10) surface. **2023**, 610, 155504 ○
- 3 Reaction between Alkynes and Catechol-Thiol Derivatives Prompted by Metal Nanocatalysis: Mechanism Study by DFT Calculation. ○
- 2 Role of Pi-Electron Density at the Interface of Small Molecule-Sensitized Solar Cells. **2023**, 127, 3928-3939 ○
- 1 Hydrothiolation of alkynes with thiol-catechol derivatives catalysed by CuNPs/TiO₂: exploring the reaction mechanism by DFT calculations. **2023**, 13, 8025-8033 ○