

Sellaoui Lotfi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3891605/publications.pdf>

Version: 2024-02-01

102
papers

5,083
citations

66234

42
h-index

102304

66
g-index

102
all docs

102
docs citations

102
times ranked

2867
citing authors

#	ARTICLE	IF	CITATIONS
1	Adsorption of congo red and methylene blue dyes on an ashitaba waste and a walnut shell-based activated carbon from aqueous solutions: Experiments, characterization and physical interpretations. <i>Chemical Engineering Journal</i> , 2020, 388, 124263.	6.6	319
2	Application of statistical physics formalism to the modeling of adsorption isotherms of ibuprofen on activated carbon. <i>Fluid Phase Equilibria</i> , 2015, 387, 103-110.	1.4	208
3	Adsorption of methylene blue from aqueous solution on activated carbons and composite prepared from an agricultural waste biomass: A comparative study by experimental and advanced modeling analysis. <i>Chemical Engineering Journal</i> , 2022, 430, 132801.	6.6	181
4	Effective adsorption of dyes on an activated carbon prepared from carboxymethyl cellulose: Experiments, characterization and advanced modelling. <i>Chemical Engineering Journal</i> , 2021, 417, 128116.	6.6	175
5	Removal of caffeine, nicotine and amoxicillin from (waste)waters by various adsorbents. A review. <i>Journal of Environmental Management</i> , 2020, 261, 110236.	3.8	152
6	Adsorption of crystal violet on biomasses from pecan nutshell, para chestnut husk, araucaria bark and palm cactus: Experimental study and theoretical modeling via monolayer and double layer statistical physics models. <i>Chemical Engineering Journal</i> , 2019, 378, 122101.	6.6	148
7	Adsorption of methylene blue on agroindustrial wastes: Experimental investigation and phenomenological modelling. <i>Progress in Biophysics and Molecular Biology</i> , 2019, 141, 60-71.	1.4	130
8	Adsorption of hazardous dyes on functionalized multiwalled carbon nanotubes in single and binary systems: Experimental study and physicochemical interpretation of the adsorption mechanism. <i>Chemical Engineering Journal</i> , 2020, 389, 124467.	6.6	125
9	Adsorption of dyes brilliant blue, sunset yellow and tartrazine from aqueous solution on chitosan: Analytical interpretation via multilayer statistical physics model. <i>Chemical Engineering Journal</i> , 2020, 382, 122952.	6.6	123
10	Interpretation of the adsorption mechanism of Reactive Black 5 and Ponceau 4R dyes on chitosan/polyamide nanofibers via advanced statistical physics model. <i>Journal of Molecular Liquids</i> , 2019, 285, 165-170.	2.3	121
11	Understanding the adsorption mechanism of phenol and 2-nitrophenol on a biopolymer-based biochar in single and binary systems via advanced modeling analysis. <i>Chemical Engineering Journal</i> , 2019, 371, 1-6.	6.6	107
12	Adsorption of amoxicillin and tetracycline on activated carbon prepared from durian shell in single and binary systems: Experimental study and modeling analysis. <i>Chemical Engineering Journal</i> , 2020, 379, 122320.	6.6	101
13	Understanding the adsorption of Pb ²⁺ , Hg ²⁺ and Zn ²⁺ from aqueous solution on a lignocellulosic biomass char using advanced statistical physics models and density functional theory simulations. <i>Chemical Engineering Journal</i> , 2019, 365, 305-316.	6.6	94
14	Insights on the statistical physics modeling of the adsorption of Cd ²⁺ and Pb ²⁺ ions on bentonite-chitosan composite in single and binary systems. <i>Chemical Engineering Journal</i> , 2018, 354, 569-576.	6.6	93
15	Adsorption of ibuprofen on organo-sepiolite and on zeolite/sepiolite heterostructure: Synthesis, characterization and statistical physics modeling. <i>Chemical Engineering Journal</i> , 2019, 371, 868-875.	6.6	92
16	H ₂ O ₂ -activated anthracite impregnated with chitosan as a novel composite for Cr(VI) and methyl orange adsorption in single-compound and binary systems: Modeling and mechanism interpretation. <i>Chemical Engineering Journal</i> , 2020, 380, 122445.	6.6	87
17	New insights into single-compound and binary adsorption of copper and lead ions on a treated sea mango shell: experimental and theoretical studies. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 25927-25937.	1.3	78
18	Experimental and theoretical studies of adsorption of ibuprofen on raw and two chemically modified activated carbons: new physicochemical interpretations. <i>RSC Advances</i> , 2016, 6, 12363-12373.	1.7	74

#	ARTICLE	IF	CITATIONS
19	Preparation and characterization of a novel mountain soursop seeds powder adsorbent and its application for the removal of crystal violet and methylene blue from aqueous solutions. <i>Chemical Engineering Journal</i> , 2020, 391, 123617.	6.6	70
20	Interpretation of single and competitive adsorption of cadmium and zinc on activated carbon using monolayer and exclusive extended monolayer models. <i>Environmental Science and Pollution Research</i> , 2017, 24, 19902-19908.	2.7	68
21	Adsorption mechanism of Zn ²⁺ , Ni ²⁺ , Cd ²⁺ , and Cu ²⁺ ions by carbon-based adsorbents: interpretation of the adsorption isotherms via physical modelling. <i>Environmental Science and Pollution Research</i> , 2021, 28, 30943-30954.	2.7	66
22	New insights into the adsorption of crystal violet dye on functionalized multi-walled carbon nanotubes: Experiments, statistical physics and COSMO-RS models application. <i>Journal of Molecular Liquids</i> , 2017, 248, 890-897.	2.3	64
23	Surfactant-modified serpentine for fluoride and Cr(VI) adsorption in single and binary systems: Experimental studies and theoretical modeling. <i>Chemical Engineering Journal</i> , 2019, 369, 333-343.	6.6	64
24	Adsorption of acid green and procion red on a magnetic geopolymer based adsorbent: Experiments, characterization and theoretical treatment. <i>Chemical Engineering Journal</i> , 2020, 383, 123113.	6.6	61
25	Insights of the adsorption mechanism of methylene blue on brazilian berries seeds: Experiments, phenomenological modelling and DFT calculations. <i>Chemical Engineering Journal</i> , 2020, 394, 125011.	6.6	60
26	Adsorption of amoxicillin and paracetamol on modified activated carbons: Equilibrium and positional entropy studies. <i>Journal of Molecular Liquids</i> , 2017, 234, 375-381.	2.3	59
27	Synthesis and characterization of a novel amphoteric adsorbent coating for anionic and cationic dyes adsorption: Experimental investigation and statistical physics modelling. <i>Chemical Engineering Journal</i> , 2018, 351, 221-229.	6.6	58
28	Monolayer and multilayer adsorption of pharmaceuticals on activated carbon: Application of advanced statistical physics models. <i>Journal of Molecular Liquids</i> , 2019, 283, 276-286.	2.3	57
29	Statistical physics interpretation of the adsorption mechanism of Pb ²⁺ , Cd ²⁺ and Ni ²⁺ on chicken feathers. <i>Journal of Molecular Liquids</i> , 2020, 319, 114168.	2.3	57
30	Performance and interactions of diclofenac adsorption using Alginate/Carbon-based Films: Experimental investigation and statistical physics modelling. <i>Chemical Engineering Journal</i> , 2022, 428, 131929.	6.6	57
31	Iron-modified composite adsorbent coating for azo dye removal and its regeneration by photo-Fenton process: Synthesis, characterization and adsorption mechanism interpretation. <i>Chemical Engineering Journal</i> , 2019, 361, 31-40.	6.6	56
32	A new statistical physics model to interpret the binary adsorption isotherms of lead and zinc on activated carbon. <i>Journal of Molecular Liquids</i> , 2016, 214, 220-230.	2.3	53
33	Adsorption of methylene blue on comminuted raw avocado seeds: Interpretation of the effect of salts via physical monolayer model. <i>Journal of Molecular Liquids</i> , 2020, 305, 112815.	2.3	53
34	Adsorption of a non-steroidal anti-inflammatory drug onto MgAl/LDH-activated carbon composite – Experimental investigation and statistical physics modeling. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 586, 124217.	2.3	51
35	Adsorption of diclofenac and nimesulide on activated carbon: Statistical physics modeling and effect of adsorbate size. <i>Journal of Physics and Chemistry of Solids</i> , 2017, 109, 117-123.	1.9	48
36	Simultaneous adsorption of acetaminophen, diclofenac and tetracycline by organo-sepiolite: Experiments and statistical physics modelling. <i>Chemical Engineering Journal</i> , 2021, 404, 126601.	6.6	48

#	ARTICLE	IF	CITATIONS
37	A new statistical physics model for the ternary adsorption of Cu ²⁺ , Cd ²⁺ and Zn ²⁺ ions on bone char: Experimental investigation and simulations. <i>Chemical Engineering Journal</i> , 2018, 343, 544-553.	6.6	47
38	Adsorption of dyes acid red 1 and acid green 25 on grafted clay: Modeling and statistical physics interpretation. <i>Journal of Molecular Liquids</i> , 2019, 294, 111610.	2.3	47
39	Understanding the adsorption mechanism of Ag ⁺ and Hg ²⁺ on functionalized layered double hydroxide via statistical physics modeling. <i>Applied Clay Science</i> , 2020, 198, 105828.	2.6	47
40	Application of a heterogeneous physical model for the adsorption of Cd ²⁺ , Ni ²⁺ , Zn ²⁺ and Cu ²⁺ ions on flamboyant pods functionalized with citric acid. <i>Chemical Engineering Journal</i> , 2021, 417, 127975.	6.6	47
41	Steric and energetic interpretations of the equilibrium adsorption of two new pyridinium ionic liquids and ibuprofen on a microporous activated carbon cloth: Statistical and COSMO-RS models. <i>Fluid Phase Equilibria</i> , 2016, 414, 156-163.	1.4	46
42	Equilibrium study of single and binary adsorption of lead and mercury on bentonite-alginate composite: Experiments and application of two theoretical approaches. <i>Journal of Molecular Liquids</i> , 2018, 253, 160-168.	2.3	46
43	Statistical physics modeling and interpretation of methyl orange adsorption on high-order mesoporous composite of MCM-48 silica with treated rice husk. <i>Journal of Molecular Liquids</i> , 2019, 285, 678-687.	2.3	46
44	Adsorption of phenol on microwave-assisted activated carbons: Modelling and interpretation. <i>Journal of Molecular Liquids</i> , 2019, 274, 309-314.	2.3	46
45	Kinetic, thermodynamic and mechanism study of the adsorption of phenol on Moroccan clay. <i>Journal of Molecular Liquids</i> , 2020, 312, 113383.	2.3	46
46	Statistical physics-based analysis of the adsorption of Cu ²⁺ and Zn ²⁺ onto synthetic cancrinite in single-compound and binary systems. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 103217.	3.3	45
47	Adsorption of ethanol onto activated carbon: Modeling and consequent interpretations based on statistical physics treatment. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2016, 444, 853-869.	1.2	44
48	Single and binary adsorption of cobalt and methylene blue on modified chitin: Application of the Hill and exclusive extended Hill models. <i>Journal of Molecular Liquids</i> , 2017, 233, 543-550.	2.3	44
49	Ternary adsorption of cobalt, nickel and methylene blue on a modified chitin: Phenomenological modeling and physical interpretation of the adsorption mechanism. <i>International Journal of Biological Macromolecules</i> , 2020, 158, 595-604.	3.6	44
50	Preparation of an avocado seed hydrochar and its application as heavy metal adsorbent: Properties and advanced statistical physics modeling. <i>Chemical Engineering Journal</i> , 2021, 419, 129472.	6.6	44
51	Adsorption of indium (III) from aqueous solution on raw, ultrasound- and supercritical-modified chitin: Experimental and theoretical analysis. <i>Chemical Engineering Journal</i> , 2019, 373, 1247-1253.	6.6	43
52	Make it clean, make it safe: A review on virus elimination via adsorption. <i>Chemical Engineering Journal</i> , 2021, 412, 128682.	6.6	40
53	Adsorption of ketoprofen and 2- nitrophenol on activated carbon prepared from winery wastes: A combined experimental and theoretical study. <i>Journal of Molecular Liquids</i> , 2021, 333, 115906.	2.3	40
54	pH tunable anionic and cationic heavy metal reduction coupled adsorption by thiol cross-linked composite: Physicochemical interpretations and fixed-bed column mathematical model study. <i>Chemical Engineering Journal</i> , 2020, 401, 126041.	6.6	39

#	ARTICLE	IF	CITATIONS
55	Physicochemical parameters interpretation for adsorption equilibrium of ethanol on metal organic framework: Application of the multilayer model with saturation. <i>Journal of Molecular Liquids</i> , 2017, 233, 537-542.	2.3	38
56	Equilibrium isotherm simulation of tetrachlorethylene on activated carbon using the double layer model with two energies: Steric and energetic interpretations. <i>Fluid Phase Equilibria</i> , 2016, 408, 259-264.	1.4	37
57	Statistical physics modeling of phosphate adsorption onto chemically modified carbonaceous clay. <i>Journal of Molecular Liquids</i> , 2019, 279, 94-107.	2.3	35
58	Implementation of a multilayer statistical physics model to interpret the adsorption of food dyes on a chitosan film. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105516.	3.3	34
59	Adsorption of ibuprofen on cocoa shell biomass-based adsorbents: Interpretation of the adsorption equilibrium via statistical physics theory. <i>Journal of Molecular Liquids</i> , 2021, 331, 115697.	2.3	33
60	Trapping of Ag ⁺ , Cu ²⁺ , and Co ²⁺ by faujasite zeolite Y: New interpretations of the adsorption mechanism via DFT and statistical modeling investigation. <i>Chemical Engineering Journal</i> , 2021, 420, 127712.	6.6	32
61	Physicochemical modeling of reactive violet 5 dye adsorption on home-made cocoa shell and commercial activated carbons using the statistical physics theory. <i>Results in Physics</i> , 2017, 7, 233-237.	2.0	30
62	Adsorption of copper (II) cation on polysulfone/zeolite blend sheet membrane: Synthesis, characterization, experiments and adsorption modelling. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 601, 124980.	2.3	30
63	Adsorption of methylene blue on silica nanoparticles: Modelling analysis of the adsorption mechanism via a double layer model. <i>Journal of Molecular Liquids</i> , 2020, 319, 114348.	2.3	28
64	Fabrication and characterization of a thin coated adsorbent for antibiotic and analgesic adsorption: Experimental investigation and statistical physical modelling. <i>Chemical Engineering Journal</i> , 2020, 401, 126007.	6.6	28
65	Equilibrium modeling of single and binary adsorption of Food Yellow 4 and Food Blue 2 on modified chitosan using a statistical physics theory: new microscopic interpretations. <i>Journal of Molecular Liquids</i> , 2016, 222, 151-158.	2.3	27
66	Statistical physics modeling and interpretation of the adsorption of dye remazol black B on natural and carbonized biomasses. <i>Journal of Molecular Liquids</i> , 2020, 299, 112099.	2.3	27
67	Modeling of muscone enantiomers olfactory response by an adsorption process onto the mouse muscone receptor MOR215-1. <i>Journal of Molecular Liquids</i> , 2016, 221, 896-903.	2.3	24
68	Synergistic adsorption of Pb ²⁺ and CrO ₄ ²⁻ on an engineered biochar highlighted by statistical physical modeling. <i>Journal of Molecular Liquids</i> , 2020, 312, 113483.	2.3	24
69	Binary adsorption isotherms of two ionic liquids and ibuprofen on an activated carbon cloth: simulation and interpretations using statistical and COSMO-RS models. <i>RSC Advances</i> , 2016, 6, 67701-67714.	1.7	23
70	Theoretical assessment of the adsorption mechanism of ibuprofen, ampicillin, orange G and malachite green on a biomass functionalized with plasma. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104950.	3.3	23
71	Investigation of the adsorption mechanism of methylene blue (MB) on Cortaderia selloana flower spikes (FSs) and on Cortaderia selloana flower spikes derived carbon fibers (CFs). <i>Journal of Molecular Liquids</i> , 2019, 280, 268-273.	2.3	22
72	Enhanced adsorption of ketoprofen and 2,4-dichlorophenoxyacetic acid on Physalis peruviana fruit residue functionalized with H ₂ SO ₄ : Adsorption properties and statistical physics modeling. <i>Chemical Engineering Journal</i> , 2022, 445, 136773.	6.6	22

#	ARTICLE	IF	CITATIONS
73	Theoretical study of hydrogen sorption on LaNi ₅ using statistical physics treatment: microscopic and macroscopic investigation. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 2699-2712.	3.8	21
74	Adsorption of 3-aminophenol and resorcinol on avocado seed activated carbon: Mathematical modelling, thermodynamic study and description of adsorbent performance. <i>Journal of Molecular Liquids</i> , 2021, 342, 116952.	2.3	21
75	Physicochemical assessment of anionic dye adsorption on bone char using a multilayer statistical physics model. <i>Environmental Science and Pollution Research</i> , 2021, 28, 67248-67255.	2.7	20
76	Lanthanum hydroxide engineered sewage sludge biochar for efficient phosphate elimination: Mechanism interpretation using physical modelling. <i>Science of the Total Environment</i> , 2022, 803, 149888.	3.9	20
77	Physicochemical interpretation of the adsorption of 4-Bromophenol and 4-Chloroaniline on an activated carbon. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104542.	3.3	18
78	Influence of plasma-based surface functionalization of palm fibers on the adsorption of diclofenac from water: Experiments, thermodynamics and removal mechanism. <i>Journal of Water Process Engineering</i> , 2021, 43, 102254.	2.6	18
79	P-C isotherms of LaNi _{4.75} Fe _{0.25} alloy at different temperatures statistical physics modeling of hydrogen sorption onto LaNi _{4.75} Fe _{0.25} : Microscopic interpretation and thermodynamic potential investigation. <i>Fluid Phase Equilibria</i> , 2016, 414, 170-181.	1.4	15
80	Origin of the outstanding performance of Zn Al and Mg Fe layered double hydroxides in the adsorption of 2-nitrophenol: A statistical physics assessment. <i>Journal of Molecular Liquids</i> , 2020, 314, 113572.	2.3	13
81	Thermodynamics and Mechanism of the Adsorption of Heavy Metal Ions on Keratin Biomasses for Wastewater Detoxification. <i>Adsorption Science and Technology</i> , 2022, 2022, .	1.5	13
82	Impact of the stacking fault and surface defects states of colloidal CdSe nanocrystals on the removal of reactive black 5. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 265, 115029.	1.7	12
83	Interpret the elimination behaviors of lead and vanadium from the water by employing functionalized biochars in diverse environmental conditions. <i>Science of the Total Environment</i> , 2021, 789, 148031.	3.9	12
84	A statistical physics analysis of the adsorption of Fe ³⁺ , Al ³⁺ and Cu ²⁺ heavy metals on chitosan films via homogeneous and heterogeneous monolayer models. <i>Journal of Molecular Liquids</i> , 2021, 343, 117617.	2.3	12
85	A microscopic study of absorption and desorption of hydrogen in LaNi _{4.85} Al _{0.15} using the grand canonical ensemble of statistical physics. <i>Fluid Phase Equilibria</i> , 2016, 425, 215-229.	1.4	10
86	Thermodynamic analysis of single and binary adsorption of Food Yellow 4 and Food Blue 2 on CC-chitosan: Application of statistical physics and IAST models. <i>Journal of Molecular Liquids</i> , 2017, 232, 499-505.	2.3	10
87	Theoretical study of hydrogen desorption on Mg ₅₀ Ni ₅₀ using statistical physics treatment. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 8733-8743.	3.8	10
88	Adsorptive removal of sunset yellow dye by biopolymers functionalized with (3-aminopropyltriethoxysilane): Analytical investigation via advanced model. <i>Journal of Molecular Liquids</i> , 2020, 312, 113395.	2.3	9
89	Using an enhanced multilayer model to analyze the performance of nickel alginate/graphene oxide aerogel, nickel alginate aerogel/activated carbon, and activated carbon in the adsorption of a textile dye pollutant. <i>Environmental Science and Pollution Research</i> , 2022, 29, 63622-63628.	2.7	9
90	Interpreting the hydrogen adsorption on organic groups functionalized MOF-5s by statistical physics model. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 10023-10037.	3.8	8

#	ARTICLE	IF	CITATIONS
91	Application of a multilayer physical model for the critical analysis of the adsorption of nicotinamide and propranolol on magnetic-activated carbon. <i>Environmental Science and Pollution Research</i> , 2022, 29, 30184-30192.	2.7	8
92	Physicochemical and thermodynamic study of malachite green adsorption on raw and modified corn straw. <i>Canadian Journal of Chemical Engineering</i> , 2018, 96, 779-787.	0.9	7
93	Theoretical interpretation of the adsorption of amoxicillin on activated carbon via physical model. <i>Environmental Science and Pollution Research</i> , 2021, 28, 30714-30721.	2.7	7
94	Theoretical study and analysis of o-nitrophenol adsorption using layered double hydroxides containing Ca-Al, Ni-Al and Zn-Al. <i>Environmental Science and Pollution Research</i> , 2021, 28, 44547-44556.	2.7	7
95	Recyclable process modeling study of hexavalent chromium elimination by thiol-based electron donor: Implications for practical applicability. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105645.	3.3	7
96	A study of single and quaternary adsorption of Cu ²⁺ , Co ²⁺ , Ni ²⁺ and Ag ⁺ on sludge modified by alkaline fusion. <i>Chemical Engineering Journal</i> , 2022, 433, 133674.	6.6	7
97	Transforming pods of the species <i>Capparis flexuosa</i> into effective biosorbent to remove blue methylene and bright blue in discontinuous and continuous systems. <i>Environmental Science and Pollution Research</i> , 2021, 28, 8036-8049.	2.7	5
98	Modeling of binary and ternary batch adsorption systems via multidimensional logistic distribution and statistical physics. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105664.	3.3	2
99	Piañava fibers as efficient material to remove a textile dye: Insights of the adsorption mechanism via advanced modelling. <i>Journal of Molecular Liquids</i> , 2021, 340, 117090.	2.3	2
100	Theoretical analysis of the removal mechanism of Crystal Violet and Acid Red 97 dyes on <i>Agaricus bisporus</i> residue. <i>Journal of Molecular Liquids</i> , 2021, 343, 117621.	2.3	2
101	Understanding the Cu ²⁺ adsorption mechanism on activated carbon using advanced statistical physics modelling. <i>Environmental Science and Pollution Research</i> , 2022, , 1.	2.7	1
102	Adaptation of advanced physical models to interpret the adsorption isotherms of lead and cadmium ions onto activated carbon in single-compound and binary systems. <i>Environmental Science and Pollution Research</i> , 2022, 29, 62507-62513.	2.7	1