

# PROGRAMA DE MAESTRÍA EN INGENIERÍA DE MATERIALES Y ENERGÍA

## Artículos en JCR del Núcleo Académico Básico

No.	Año	Tipo de artículo	Título del artículo	Nombre de la revista	Autores
1	2020	JCR	A DFT-based simulated annealing method for the optimization of global energy in zeolite framework systems: Application to natrolite, chabazite and Clinoptilolite	Microporous and Mesoporous Materials	<b>M. Abatal</b> , A.R Ruiz-Salvador, N.C. Hernández
2	2020	JCR	Carbonaceous material obtained from bark biomass as adsorbent of phenolic compounds from aqueous solutions.	Journal of Environmental Chemical Engineering	<b>M Abatal*</b> , I. Anastopoulos, D.A. Giannakoudakis, M.T. Olguin
3	2020	JCR	Assessment of Leucaena leucocephala as bio-based adsorbent for the removal of Pb <sup>2+</sup> , Cd <sup>2+</sup> and Ni <sup>2+</sup> from water.	Desalination and water Treatment	C.A. Cimá-Mukul, M.T. Olguín, <b>M. Abatal*</b> , J. Vargas, Jesús Alberto Barrón-Zambrano, Alejandro Ávila-Ortega, A.A. Santiago
4	2020	JCR	Quantification of the microporosity effect on permeability of porous rocks.	Journal of Porous Media	Ismeli Alfonso, <b>Mohamed Abatal</b> , Iván Castro, Alberto Beltrán, Alejandra Fuentes, Armando García
5	2020	JCR	Enhancing the capacitance and tailoring the discharge times of flexible graphene supercapacitors with cobalt ferrite nanoparticles	Synthetic Metals	S Martinez-Vargas, Al Mtz-Enriquez, H Flores-Zuñiga, A Encinas, J Oliva
6	2020	JCR	Phytotoxicity and upper localization of Ag@CoFe <sub>2</sub> O <sub>4</sub> nanoparticles in wheat plants	Environmental Science and Pollution Research	Jaime López-Luna, Soledad Cruz-Fernández, Donald Stewart Mills, Arturo Isaías Martínez-Enríquez, Fernando Amilcar Solís-Domínguez, María del Carmen Ángeles González-Chávez, Rogelio Carrillo-González, Sergio Martinez-Vargas, Oscar Francisco Mijangos-Ricardez, María del Carmen Cuevas-Díaz.
7	2020	JCR	Synthesis and Characterization of Cobalt Ferrite Co <sub>x</sub> Fe <sub>3-x</sub> O <sub>4</sub> Nanoparticles by Raman Spectroscopy and X-Ray Diffraction	International Journal of Metallurgy and Metal Physics	Gil A Flores, Benavides O, Vargas S Martínez, May L De La Cruz, Carachure C Patiño

8	2019	JCR	Relationship between Si/Al ratio and the sorption of Cd(II) by natural and modified clinoptilolite-rich tuff with sulfuric acid.	Desalination and water Treatment	Y Abdellaoui, MT Olguiin, <b>M Abatal</b> , A Bassam, G Giácoman-Vallejo
9	2019	JCR	Removal of an Ethoxylated Alkylphenol by Adsorption on Zeolites and Photocatalysis with TiO <sub>2</sub> /Ag.	Processes	C.A. Ucán, <b>M. Abatal</b> , CM Romero, F.A. Franseschi, M.A.R. Elias, D.C. Lozano
10	2019	JCR	Structural and Electric Properties of the Ru <sub>0.9</sub> M <sub>0.1</sub> Sr <sub>2</sub> GdCu <sub>2</sub> O <sub>8</sub> System with M = Zr, Mo, and Mn.	Iranian Journal of Materials Science and Engineering	<b>M. Abatal</b> , A. Gonzalez-Parada , A. Quiroz , S. E. Diaz-Mendez , H. Alazki , V. García-Vázquez , E. Chavira
11	2019	JCR	Sorption of Pb(II) from Aqueous Solutions by Acid-Modified Clinoptilolite-Rich Tuffs with Different Si/Al Ratios.	Applied Science	<b>Mohamed Abatal</b> , Atl V Córdova Quiroz, María T Olgún, América R Vázquez-Olmos, Joel Vargas, Francisco Anguebes-Franceschi, German Giácoman-Vallejos
12	2019	JCR	Synthesis and Gas Permeability of Chemically Cross-Linked Polynorbornene Dicarboximides Bearing Fluorinated Moieties.	Macromolecular Chemistry and Physics	Ivette Aranda-Suárez, Carlos Corona-García, Arlette A Santiago, Salvador López Morales, <b>Mohamed Abatal</b> , Mar López-González, Joel Vargas
13	2019	JCR	Eco-efficient biosorbent based on Leucaena Leucocephala Residues for the Simultaneous Removal of Pb(II) and Cd(II) Ions from Water System: Sorption and Mechanism.	Bioinorganic Chemistry and Applications	César Antonio Cimá-Mukul, Youness Abdellaoui, <b>Mohamed Abatal</b> , Joel Vargas, Arlette A. Santiago, and Jesús Alberto Barrón-Zambrano
14	2019	JCR	Physical and chemical properties of biodiesel obtained from Amazon Sailfin Catfish ( <i>Pterygoplichthys pardalis</i> ) biomass oil.	Journal of Chemistry	Francisco Anguebes-Franceschi, A. Bassam, <b>Mohamed Abatal</b> , Oscar May Tzuc, C. Aguilar-Ucán, Armando T. Wakida-Kusunoki, Sosimo E. Diaz-Mendez, and Liliana C. San Pedro
15	2019	JCR	Comparison of the divalent heavy metals (Pb, Cu and Cd) adsorption behavior by montmorillonite-KSF and their calcium- and sodium-forms.	Superlattices and Microstructures	Y Abdellaoui, M.T Olgún, <b>M Abatal</b> , B Ali, SED Méndez, AA Santiago
16	2019	JCR	Lead-free perovskite based bismuth for solar cells absorbers.	Journal of Alloys and Compounds	Ismail Benabdallah, Mourad Boujnah, Abdallah El Kenz, Abdelilah Benyoussef, <b>Mohamed Abatal</b> , Ali Bassam
17	2019	JCR	Raman Spectroscopy and Chemometric Modeling to Predict Physical-Chemical Honey Properties from Campeche, Mexico.	Molecules	F Anguebes-Franceschi, <b>M Abatal</b> , Lucio Pat, A Flores, AV Córdova Quiroz, MA Ramírez-Elias, L San Pedro, O May Tzuc, A Bassam

18	2018	JCR	Fractal dimensión determination of rock pores by multi-scale analysis of images obtained using OM, SEM and XCT.	Fractal	Alfonso, Ismeli; Beltrán, Alberto; <b>Abatal, Mohamed</b> ; Castro, Iván; Fuentes, Alejandra; Vázquez, Leonor; García, Armando
19	2018	JCR	Structural, electrical and magnetic properties of the pyrochlorate Er <sub>2-x</sub> Sr <sub>x</sub> Ru <sub>2</sub> O <sub>7</sub> .	Revista Mexicana de Física	Adolfo Quiroz, Elizabeth Chavira, Valentín García-Vázquez, G. González, and <b>Mohamed Abatal</b>
20	2018	JCR	Preparation, characterization and temperature-dependent photoluminescence in Ca <sub>0.90</sub> Sr <sub>0.10</sub> RuO <sub>3</sub> compound.	Revista Mexicana de Física	Adolfo Quiroz, <b>M. Abatal</b> , E Chavira, V García-Vázquez, E Marinero, M Nishioka
21	2018	JCR	Sorption of Cd(II), Ni(II) and Zn(II) by natural, sodium, and acid-modified clinoptilolite-rich tuff.	Environment Protection Engineering	<b>Mohamed Abatal</b> , María Teresa Olguín, Youness Abdellaoui, Abdesslam El Bouari
22	2018	JCR	Esterification Optimization of Crude African Palm Olein Using Response Surface Methodology and Heterogeneous Acid Catalysis.	Energies	Francisco Anguebes-Franceschi, <b>Mohamed Abatal</b> , Ali Bassam, Mauricio Escalante Soberanis, Oscar May Tzuc, Lauro Bucio-Galindo, C. A. Aguilar Ucan, M. A. Ramírez-Elias.
23	2018	JCR	Economic, environmental and health co-benefits of the use of advanced control strategies for lighting in buildings of Mexico.	Energy Policy	S.E. Diaz-Mendez, A.A. Torres-Rodríguez, <b>M. Abatal</b> , M.A. Escalante Soberanis, A. Bassam, G.K. Pedraza-Basulto
24	2018	JCR	Multivariate optimization of Pb (II) removal for clinoptilolite-rich tuffs using genetic programming: A computational approach.	Chemometrics and Intelligent Laboratory Systems	Tzuc, O. M., Bassam, A., <b>Abatal, M.</b> , El Hamzaoui, Y., & Tapia, A
25	2018	JCR	Structure of a luminescent 3D coordination polymer constructed with a trinuclear core of cadmium-trimesate and isoquinoline	Inorganica Chimica Acta	José Carlos Rendón-Balboa, Luis Villanueva-Sánchez, Luis David Rosales-Vázquez, Josue Valdes-García, Alfredo R Vilchis-Nestor, Diego Martínez-Otero, Sergio Martínez-Vargas, Alejandro Dorazco-González
26	2018	JCR	As (III) and As (V) adsorption on manganese ferrite nanoparticles	Journal of Molecular Structure	Sergio Martínez-Vargas, Arturo I Martínez, Elias E Hernández-Beteta, Oscar F Mijangos-Ricardez, Virgilio Vázquez-Hipólito, Cristóbal Patiño-Carachure, Jaime López-Luna
27	2018	JCR	Corrosion study of Al–Fe (20 wt-%) alloy in artificial sea water with NaOH additions	Canadian Metallurgical Quarterly	JE Flores-Chan, A Bedolla-Jacuinde, C Patiño-Carachure, G Rosas, MA Espinosa-Medina

28	2018	JCR	GaN decomposition after high-energy ball milling and its transformation to BN hollow spheres in annealing samples doped with B	Materials Characterization	JF Aguilar-Prado, D Mendoza-Cachú, JE Flores-Chan, G Rosas
29	2017	JCR	SYNTHESIS OF ONION-LIKE CARBON-REINFORCED AlCuFe QUASICRYSTALS BY HIGH-ENERGY BALL MILLING	Journal of Alloys and Compounds	C. Patiño-Carachure J. E. Flores-Chan A. Flores Gil G. Rosas.
30	2017	JCR	Artificial neural networks for modeling and optimization of phenol and nitrophenols adsorption onto natural activated carbon	Desalination and Water Treatment	Y. El Hamzaoui, <b>M. Abatal</b> , A. Bassam, F. Anguebes-Franceschi, O. Oubram, I. Castaneda Robles, O. May Tzuc
31	2017	JCR	Comparison of lead removal from aqueous solution between natural-, sodium-, and acid-modified clinoptilolite-rich tuffs	desalination and water treatment	<b>M. Abatal</b> , M. T. Olguin
32	2017	JCR	Modeling the adsorption of phenols and nitrophenols by activated carbon using genetic programming.	Journal of Cleaner Production	Z Emigdio, <b>Mohamed Abatal</b> , Ali Bassam, Leonardo Trujillo, Perla Juárez-Smith, Youness El Hamzaoui
33	2017	JCR	Interrelation Between Structural and Electrical Properties in RuSr <sub>2</sub> GdCu <sub>2</sub> O <sub>8±Z</sub> Prepared Under Different Annealing Conditions	Ieee Transactions On Applied Superconductivity	Valentin Garcia-Vazquez, <b>Mohamed Abatal</b> , Outmane Oubrame, Ismeli Alfonzo, Hussain Alazki, Jose O Flores- Flores, Adolfo Quiroz, Jose C Flores-Garcia, Gonzalo Gonzalez
34	2017	JCR	Arsenic adsorption on cobalt and manganese ferrite nanoparticles.	Journal of Materials Science	S. Martinez-Vargas, Arturo I. Martnez, Elias E. Hernández-Beteta, O. F. Mijangos-Ricardez, V. Vázquez-Hipólito, C. Patiño-Carachure, H. Hernandez-Flores, J. López-Luna
35	2017	JCR	CFD and scale test study of harvesting energy from tidal stream using vortex induced vibration: circular vs square cross-section cylinders	Energy for Sustainable Development	S.E. Diaz-Mendez, M. Rodriguez- Blanco
36	2017	JCR	Economic, Environmental and Health Co-benefits of the Use of Advanced Controls Strategies for	Energy Policy	S.E. Diaz-Mendez, A.A. Torres- Rodríguez
37	2017	JCR	Numerical assessment of power losses in 3D rod-shaped PEM fuel cells due to	Renewable Energy An International Journal	S.E. Diaz-Mendez, J.M.T. Sierra-Grajeda, S.J. Figueroa-Ramirez, M.

			overpotential		A. Meza-Izquierdo
38	2017	JCR	Synthesis of onion-like carbon-reinforced AlCuFe quasicrystals by high-energy ball milling	Journal of Alloys and Compounds	C Patiño-Carachure, JE Flores-Chan, A Flores Gil, G Rosas
39	2016	JCR	LASER WAVELENGTH EFFECT ON NANOSECOND LASER LIGHT REFLECTION IN ABLATION OF METALS	Laser Physics	Olena Benavides Lelio de la Cruz May Efraín E. Mejia J. A. Ruz Hernández Aarón Flores Gil
40	2016	JCR	Alumina nanowire growth by water decomposition and the peritectic reaction of decagonal Al 65 Cu 15 Co 20 quasicrystals	Materials Characterization	J.O. Téllez-Vázquez, C. Patiño- Carachure, G. Rosas
41	2016	JCR	Corrosion Study of Al-Fe (20 wt%) Alloy in Seawater Alkaline Solutions	International Journal of ELECTROCHEMICAL SCIENCE	J.E. Flores-Chan, A. Torres-Islas, C. Patiño-Carachure, G. Rosas, M. A. Espinosa-Medina
42	2016	JCR	Estimation of elastic moduli of particulate-reinforced composites using finite element and modified Halpin-Tsai models	J Braz. Soc. Mech. Sci. Eng.	I. Alfonso, I. A. Figueroa, V. Rodriguez Iglesias, C. Patiño Carachure, A. Medina, Flores, L. Bejar, L. Pérez
43	2016	JCR	Mechanosynthesis of MFe <sub>2</sub> O <sub>4</sub> (M = Co, Ni, and Zn) Magnetic Nanoparticles for Pb Removal from Aqueous Solution	Journal of Nanomaterials	America R. Vazquez-Olmos, <b>Mohamed Abatal</b> , Roberto Y. Sato-Berru, G. K. Pedraza-Basulto, Valentin Garcia- Vazquez, Arianee Sainz-Vidal, R. Perez-Bañuelos, A. Quiroz
44	2016	JCR	3D CFD modeling of a PEM fuel cell stack	Int. J. of Hydrogen Energy	J. Macedo-Valencia, J. M. Sierra*, S. J. Figueroa-Ramírez, S. E. Díaz, and M. Meza
45	2016	JCR	Application of Multivariable Analysis and FTIR-ATR Spectroscopy to the Prediction of Properties in Campeche Honey	Journal of Analytical Methods in Chemistry	Francisco Anguebes, Lucio Pat, Bassam Ali, Armando Guerrero, Atl V. Córdova, <b>Mohamed Abatal</b> , and José P. Garduza
46	2016	JCR	Evolution of the structural and electronic properties of small alkali metal-doped aluminum clusters	Computational and Theoretical Chemistry	K.O. Alcantar-Medina, M. Herrera-Trejo, A. Tlahuice-Flores, S. Martinez-Vargas, J. Oliva, A.I. Martinez
47	2016	JCR	What difference does a thiophene make? Evaluation of a 4, 4'-bis (thiophene) functionalised 2, 2'-bipyridyl copper (I) complex in a dye-sensitized solar cell	Dyes and Pigments	Kathryn A Wills, Humberto J Mandujano-Ramírez, Gabriel Merino, Gerko Oskam, Paul Cowper, Matthew D Jones, Petra J Cameron, Simon E Lewis

48	2016	JCR	Corrosion study of Al-Fe (20 wt%) alloy in seawater alkaline solutions	Int. J. Electrochem. Sci	JE Flores-Chan, A Torres-Islas, C Patiño-Carachure, G Rosas, MA Espinosa-Medina
49	2015	JCR	EXPERIMENTAL STUDY ON REFLECTION OF HIGH-INTENSITY NANOSECOND ND:YAG	Optics and lasers in Engineering	O. Benavides L. de la Cruz May A. Flores Gil J. A. Lugo Jimenez
50	2015	JCR	Physical conditions in regions of line formation of solar type stars	Astrophysics	Lino, H. Rodriguez-Merino Octavio Cardona Nuñez Aarón Flores Gil
51	2015	JCR	Corrosion Behavior of psi and beta Quasicrystalline Al-Cu-Fe Alloy	Acta Metall. Sin. (Engl. Lett.)	Alvaro Torres, Sergio Serna, Cristobal Patino, Gerardo Rosas
52	2015	JCR	Considerations in the Internal Corrosion Mitigation	ECS trans	Gabriela Karina Pedraza Basulto, Lorenzo Martinez, Dulce Ortega, Jorge Cantó, and Irene Carrillo
53	2015	JCR	Torque Ripple Reduction in an Axial Flux High Temperature Superconducting Motor	IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY	A. González-Parada, F. Trillaud, R. Guzmán-Cabrera, <b>M. Abatal</b>

