



## Ghodratollah Roudini Associate Professor

Faculty : Engineering

Departments : Materials Engineering

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University of Sistan and Baluchestan, Daneshgah Ave., Zahedan,  
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## Education

- ✓ B.Sc, Materials Engineering, Shiraz University - 1990
- ✓ MS, Materials Engineering, University of Tehran - 1994
- ✓ PhD, Materials Engineering, E'cole Polytechnic fe'de'rale de Lausanne (EPFL) - 2007

## Courses

- |                                          |                                    |
|------------------------------------------|------------------------------------|
| 1. Advanced Materials                    | 2. Selection of metallic Materials |
| 3. Technical ENGLISH                     | 4. Nanocomposites                  |
| 5. Metal Forming1                        | 6. Materials Selection             |
| 7. Mechanical Properties of Materials 2  | 8. Powder Metallurgy               |
| 9. THEORY OF DISLOCATION                 | 10. Composites                     |
| 11. Mechanical Properties of Materials I | 12. Theory Of Dislocations         |

## Master Thesis

### 1. Study of hot forging on mechanical properties of Al alloy/ Al<sub>2</sub>O<sub>3</sub>-SiC hybrid metal matrix composite

مسلم حمزه, [Ghodratollah Roudini, Morteza Khosravi]

نیمسال اول سال تحصیلی ۹۷-۹۸

### 2. design and fabrication of anode electrode for the improvement of fuel cell performance

روح الله چغتایی, [Ghodratollah Roudini, Farahnaz Barahuie, Siti u jila Binti masuri]

نیمسال اول سال تحصیلی ۹۷-۹۸

### 3. Fabrication and application of phase change material nanocomposites using graphene and sio<sub>2</sub> particles as thermal energy storage systems and temperature control in the intelligent buildings

سیدمصطفی موسوی, [Ghodratollah Roudini, Farahnaz Barahuie, Siti u jila Binti masuri]

نیمسال اول سال تحصیلی ۹۶-۹۷

### 4. Investigation of corrosion in zahedan soil of x60 steel

قاسم فرقانی معزاباد, [Ghodratollah Roudini, Morteza Khosravi]

نیمسال اول سال تحصیلی ۹۶-۹۷

### 5. Investigation of corrosion resistant nanocomposite of graphene oxide/zirconia on steel by electrochemical approach

علی قلی پور, [Ghodratollah Roudini, Yadollah Yaghoubinezhad]

نیمسال اول سال تحصیلی ۹۶-۹۷

### 6. Mechanical and thermal properties of polymer matrix composites containing basalt fiber-carbon nanofiber

محمد کرامتی, [Hamed Khosravi, Ghodratollah Roudini]

نیمسال دوم سال تحصیلی ۹۵-۹۶

### 7. fabrication of FeTic composite on the surface of steel via submeged arc cladding process

حسن زینلی مقدم, [Mahmood Sharifabar, Ghodratollah Roudini]

نیمسال اول سال تحصیلی ۹۵-۹۶

### 8. the effect of annealing and thickness reduction on the anisotropy behavior

ساره سلطانی نژاد, [Ghodratollah Roudini, Esmaeil Tohidlou]

نیمسال اول سال تحصیلی ۹۵-۹۶

### 9. synthesis of phase change material nanocomposites...

سمیرا گلستانی رنجبر, [Ghodratollah Roudini, Farahnaz Barahuie]

نیمسال اول سال تحصیلی ۹۵-۹۶

### 10. Design and synthesis of phase chang material,n heptadecane nanocomposites using activated carbon and graphite as an effective energy storage systems

داریوش سرابندی, [Ghodratollah Roudini, Farahnaz Barahuie]

نیمسال اول سال تحصیلی ۹۵-۹۶

### 11. Study of pitch-alumina nanoparticles composite coating on corrosion resistance gas steel pipes

ساسان حسینی, [Ghodratollah Roudini, Ahmad amin Khalili]

نیمسال دوم سال تحصیلی ۹۴-۹۵

**12. effect of intermetallic compounds on the mechanical properties of copper-aluminum laminated composite**

مرتضیه امام دادی, [Ghodratollah Roudini, Morteza Khosravi]

نیمسال اول سال تحصیلی ۹۵-۹۴

**13. Friction stir welding of HSLA steel(X70)**

مظاہر توسن, [Ghodratollah Roudini, , ]

نیمسال اول سال تحصیلی ۹۵-۹۴

**14. Extrusion of high strength Al-alloys 2024 with solution heat treatment**

محمد معصومی قلقوچان, [Ghodratollah Roudini, ]

نیمسال اول سال تحصیلی ۹۵-۹۴

**15. Synthesis of Cu (Al<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub>) layer hibrid composite by combination of electrophoresis and hot pressing methods**

حمدیرضا نورزایی, [Ghodratollah Roudini, Mahdi Shafiee Afarani]

نیمسال اول سال تحصیلی ۹۳-۹۴

**16. synthesis of Al(Al<sub>2</sub>O<sub>3</sub>/SiC) layer hibrid composite by combination of electrophoresis and hot pressing methods**

عاطفه اکبریان, [Ghodratollah Roudini, Mahdi Shafiee Afarani]

نیمسال اول سال تحصیلی ۹۳-۹۴

**17. synthesis of Al(Al<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub>) layer hibrid composite by combination of electrophoresis and hot pressing methods**

هانیه صفاری, [Ghodratollah Roudini, Mahdi Shafiee Afarani]

نیمسال اول سال تحصیلی ۹۳-۹۴

**18. production and fatigue of Al-Al<sub>2</sub>O<sub>3</sub>-Si C hybrid composite made in to semi-solid**

جعفر آقابور, [Morteza Khosravi, Ghodratollah Roudini]

نیمسال اول سال تحصیلی ۹۳-۹۴

**19. CNT application as thermal interlayer in microelectronic and microelectromechanical systems**

محمد مددوھی, [Ghodratollah Roudini, Tahereh Fanaei Sheikholeslami]

نیمسال اول سال تحصیلی ۹۳-۹۴

**20. fabrication of Al/SiC-Al<sub>2</sub>O<sub>3</sub> interpenetratig phases composite**

محسن باقری دولت ابادی, [Ghodratollah Roudini, Mahdi Shafiee Afarani]

نیمسال اول سال تحصیلی ۹۳-۹۴

**21. Fatigue behavior of hybrid laminated composite by Hand lay-up method**

علیرضا سعیدی ولاشانی, [Ghodratollah Roudini]

نیمسال اول سال تحصیلی ۹۳-۹۴

**22. fabrication of antibacterial ceramics**

عادله عزیزی مقدم, [Ghodratollah Roudini, Davod Mohebbi Kalhor]

نیمسال اول سال تحصیلی ۹۲-۹۳

**23. production and evalution of mechanical properties of aluminum laminated hybrid composite reinforced by alumina-zirconium oxide by hot-pressing**

مجتبی ضیابخش, [Ghodratollah Roudini]

نیمسال اول سال تحصیلی ۹۲-۹۳

**24. mechanical behaviour of composit, light metal matrix composit, steel wires**

[نگین نبی زاده سرابندی, Ghodratollah Roudini]

نیمسال اول سال تحصیلی ۹۲-۹۳

**25. fabrication and study heat transfer in the copper layar- aluminum foam composites**

[اعظم ندافی, Ghodratollah Roudini, Amin Behzadmehr]

نیمسال اول سال تحصیلی ۹۲-۹۳

**26. effect of alumina powder on the stress corrosion cracking behavior of alumina-copper laminated composites**

[سمانه رضایی, Ghodratollah Roudini, Ali Davoodi]

نیمسال اول سال تحصیلی ۹۲-۹۳

**27. fabrication and study of mechanical properties steel-aluminum metal laminated composite**

[زهرا حسینی, Ghodratollah Roudini]

نیمسال اول سال تحصیلی ۹۲-۹۳

**28. fabrication of Al/SiC-Al<sub>2</sub>O<sub>3</sub> interpenetratig phases composite**

[محسن باقری دولت ابادی, Ghodratollah Roudini, Mahdi Shafiee Afarani]

نیمسال اول سال تحصیلی ۹۲-۹۳

**29. fatigue behaviour of nanocomposite alal2o3**

[فاطمه محمدخانی, Ghodratollah Roudini, ]

نیمسال دوم سال تحصیلی ۸۹-۹۰

**30. Fabrication of Mg/SiC interpenetrating phase composite by melt infiltration and characterization of its properties**

[غلامحسین نوذری, Ghodratollah Roudini, ]

نیمسال اول سال تحصیلی ۸۹-۹۰

**31. Investigation of precipitation effect on the corrosion and deterioration of brine heater of multi stage flash desalination unit in chabahar**

[زهرا حاصلی, Ghodratollah Roudini, Amin Behzadmehr, Ahmad amin Khalili]

نیمسال اول سال تحصیلی ۸۹-۹۰

**32. The effect of packing on sintered alumina porous supports**

[محمدجواد قادری, Mahdi Shafiee Afarani, Ghodratollah Roudini]

نیمسال اول سال تحصیلی ۸۹-۹۰

**33. The Fabrication investigation of properties the composite Al/Al<sub>2</sub>O<sub>3</sub> with continous phase by squeeze casting method**

[سیدمهدی کاشفی فدافن, Ghodratollah Roudini]

نیمسال اول سال تحصیلی ۸۹-۹۰

**34. atigue Behaviour of Nanocomposite Al-Al<sub>2</sub>O<sub>3</sub>**

, [Ghodratollah Roudini, ]

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## Journals Papers

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### 2020

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**1. Fabrication and characterization of phase change material-SiO<sub>2</sub> nanocomposite for thermal energy storage in buildings**

Samira Golestani ranjbar, Ghodratollah Roudini, Farahnaz Barahuie

Journal of Energy Storage Volume: (27) 101168-1 - 101168-8

### 2019

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**2. Microstructure and wear properties of Fe-TiC composite coatings produced by submerged arc cladding process using ferroalloy powder mixtures**

Hassan Zeinali Moghaddam, Mahmood Sharifabar, Ghodratollah Roudini

SURFACE and COATINGS TECHNOLOGY Volume: (361) 91 - 101

**3. Activated carbon derived from pine cone as a framework for the preparation of n-heptadecane nanocomposite for thermal energy storage**

Dariush Sarabandi, Ghodratollah Roudini, Farahnaz Barahuie

Journal of Energy Storage Volume: (24) 100795-1 - 100795-8

**4. Study of mechanical properties of high volume fraction aluminum/steel shots metal matrix composites**

Ghodratollah Roudini,

Materials Research Express Volume: (6) 1265h6 - 1 - 1265h6 -10

### 2018

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**5. Effects of Ti addition on the microstructure and mechanical properties of multi-pass E6010 high-cellulosic electrode weld metal**

, Mahmood Sharifabar, Ghodratollah Roudini

APPLIED PHYSICS A-MATERIALS SCIENCE and PROCESSING Volume: (124) 1-772 - 12-772

**6. Compression and impact strength study of aluminum-alumina granule composite by squeeze-casting method**

Ghodratollah Roudini, Morteza Khosravi, M Kha

Volume: (5) 387 - 394

### 2017

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**7. FABRICATION OF HIGH VOLUME FRACTION ALUMINA/ALUMINUM COMPOSITES VIA REACTION SINTERING ROUTE**

Keyvan Piry, Mahdi Shafiee Afarani, Ghodratollah Roudini

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Journal of Chemical Technology and Metallurgy Volume: (52) 12 - 18

**2015**

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**8. High-volume-fraction Cu/Al<sub>2</sub>O<sub>3</sub>-SiC hybrid interpenetrating phase composite**

Hesam Saidi, Ghodratollah Roudini, Mahdi Shafiee Afarani

APPLIED PHYSICS A-MATERIALS SCIENCE and PROCESSING Volume: (121) 109 - 113

**2013**

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**9. Diffusion in FSW joints by inserting the metallic foils**

S. Gholami Shiri, Asma Sarani, Reza Elmi hosseini, Ghodratollah Roudini

JOURNAL OF MATERIALS SCIENCE and TECHNOLOGY Volume: (29) 1091 - 1095

**10. Synthesis of alumina porous supports via different compaction routes: vibration and pressing**

, Mahdi Shafiee Afarani, Ghodratollah Roudini

Journal of Chemical Technology and Metallurgy Volume: (3) 289 - 295

**2012**

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**11. Producing replicated open-cell aluminum foams by a novel method of melt squeezing procedure**

, Ghodratollah Roudini

MATERIALS LETTERS Volume: (76) 233 - 236

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## Conferences Papers

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### 2018

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#### 1. Activated carbon derived from pine cone as a framework for the preparation of n-heptadecane nanocomposite for thermal energy storage medium

The 7th international conference on materials engineering and metallurgy

Dariush Sarabandi, Ghodratollah Roudini, Farahnaz Barahuie

#### 2. N-heptadecane- graphene nanocomposite for energy conversion and storage

7th international conference on materials engineering and metallurgy

Mohadeseh Amirabadi Khabisi, Farahnaz Barahuie, Hamed Sheybani, Ghodratollah Roudini

### 2017

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#### 3. Fabrication of Fe-TiC composite on the surface of steel by submerged arc cladding process

The 6th international conference on materials engineering and metallurgy

Hassan Zeinali Moghaddam, Mahmood Sharifabar, Ghodratollah Roudini

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## Executive activities

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### معاون طرح و توسعه دانشگاه

from 1394/07/01 - to 1398/06/21

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## Research Project

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2009

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1. Corrosion study of submersible water pumps in Zahedan, zabbol and khash zones

Ghodratollah Roudini - 2009

1999

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2. Design and Production of the Support M600,M300, machines

Ghodratollah Roudini - 1999

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3. Corrosion study of desalination by distillation unit in chabahar zone

Ghodratollah Roudini -

4. Investigation of coatings effect on corrosion behavior of IN738LC superalloy

Ghodratollah Roudini -